Student Name:

MAGNUS
CHURCH OF ENGLAND
ACADEMY

Knowledge Organiser: June 2026

Year 10

“Wise men and women are always learning, always listening for fresh insights.”
Proverbs 18:15 (The Message)

Determination – Integrity – Ambition – Humility – Compassion

Using Your Knowledge Organiser

Your teachers have worked hard to produce this document for you and have selected the most important knowledge that you will need to know to make good progress in their subjects. **You should aim to learn all the information in your knowledge organiser off by heart.**

Try out some of the strategies listed here to help you achieve this.

1. Read the knowledge organiser and ensure you understand it. Try and make links between the information on it and what you already know and do.

2. Look, Cover, Write, Check – the traditional way of learning spellings!

3. Create a Mnemonic – Using the first letters of keywords create a memorable sentence or phrase.

4. Create an acronym – using the first letters of keywords to create a word to prompt you to remember all of the information.

5. Write it out in full on a blank version of the same format.

6. Write it out in note form, reducing it to key ideas or words. Try the same format but a smaller piece of paper.

7. Recreate the knowledge organiser as a series of images and words

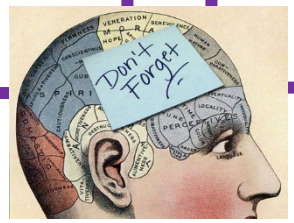
8. Write a set of test questions for yourself using the organiser.
    - Answer these without the organiser the next day.
    - Swap your questions with a friend to increase challenge.
    - Turn your questions in to a game by putting them on cards and playing with friends.

9. Chunk the knowledge into smaller bitesize sections of around 5 pieces of information. Concentrate on mastering a chunk before you start on the next.

10. Try to make connections between the information and people you know. E.g. Visualise yourself trying these strategies with a specific teaching group.

11. Talk about the information on the knowledge organiser with another person. Teaching someone else about it helps us learn it.

12. Say the information out loud – rehearse it like learning lines for a play, or sing it as if you are in a musical!



Year 10 English: Spoken Language

1.Presentation Techniques:	
Enunciation	To say or pronounce a word in a way that is understandable and audible.
Pace	The speed at which you speak. By speaking quickly, you can indicate speed, urgency or danger. By speaking slowly, you can suggest tension or fear.
Pause	The deliberate use of silence as a technique to emphasise a point/give your listener a moment to process what you've said or to create tension.
Gestures	A form of non-verbal communication either in place of, or at the same time as, speech. Gestures include movement of the hands, face, or other parts of the body.
Emphasis	To make particular words or phrases stand out by using any of the above.
Eye contact	Engaging the listener by confidently looking at them whilst addressing them.

2. Persuasive Devices:	
Power of 3	A list of three words or linked ideas.
Emotive Language	Powerful words that make the reader feel an emotion.
Rhetorical question	A question that doesn't need an answer, but makes the reader think.
Say it again	Repeat an idea/word/phrase.
Undermine the opposition	Present an opposing view before discrediting it.
Anecdote	A short story/example which illustrates your point or argument.
Direct address	You speak directly to the audience.
Exaggeration (Hyperbole)	Deliberately using over-the-top statements or expressions for emphasis.

3. Key Vocabulary

Speaking and Listening

- **Phrases to Illustrate a Point:** For instance, for example, specifically, in particular, namely, such as, like
- **Phrases to Introduce an Example:** For example, thus, as an example, in the instance of, in other words, to illustrate
- **Phrases to Make Suggestions:** To this end, keeping this in mind, for this purpose, therefore
- **Phrases to Transition Between Information:** Also, furthermore, additionally, besides that, equally as important, similarly, likewise, as a result, otherwise, however
- **Phrases to Contrast Points:** On the other hand, nevertheless, despite, in spite of, yet, conversely, instead, by the same token
- **Phrases for Conclusions and Summarizing:** With this in mind, as a result of, because of this, for this reason, so, due to, since, finally, in short, in conclusion

Year 10 — English Literature Paper 1 Revision

Macbeth, William Shakespeare

'For brave Macbeth--well he deserves that name --'	Macbeth is portrayed as a strong and loyal soldier, respected by others and the King. This is important as it inflates the tragedy of his downfall and emphasises how his ambition poisons him and turns him evil.
'Stars, hide your fires; / Let not light see my black and deep desires, / The eye wink at the hand. '	This clearly identifies the contrast between light and darkness (good and evil) and how Macbeth is conflicted by his deep evil ambitions and the consequences of his actions both personally and religiously (stars being heaven).
'Come you spirits, that tend on mortal thoughts. Unsex me here, and fill me, from the crown to the toe, top-full of direst cruelty"	Lady Macbeth shows her own ambition to be less feminine and take on the role of her husband, asking spirits to fill her with evil and the ability to kill the King to achieve power. It shows her willingness to welcome evil into her life, and emphasises the link between the supernatural and evil in the play.
"Will all great Neptune's ocean wash this blood clean from my hand"	After killing Duncan, Macbeth is overcome with guilt, represented through the motif/symbol of blood in the play. Here he says that even all the seas could not wash it from his hand, he will forever feel it.
'To be thus is nothing but to be safely thus'	After becoming King, Macbeth is still not content that his ambition is fulfilled. His paranoia has set in and he worries about Banquo and his son.
"I am in blood, steeped in so far, that, should I wade no more, returning were as tedious as go o'er"	After killing Banquo and being haunted by his Ghost, Macbeth decides that his evil actions have taken him this far and to turn back would make his previous decisions pointless. To let go of his power would have it all have been for nothing.
"Will these hands ne'er be clean?'	Lady Macbeth is also overcome with guilt by Act 5, even after previously showing little regard for Duncan's death in Act 1 and 2. She sleepwalks, trying to clean her hands of the blood (guilt) that eventually leads top her death.
'dead butcher, and his fiend-like queen'	Malcolm's final words on Macbeth and Lady Macbeth as he takes back the crown of Scotland in the final scene of the play, emphasising the effect their ambition ultimately had on them.

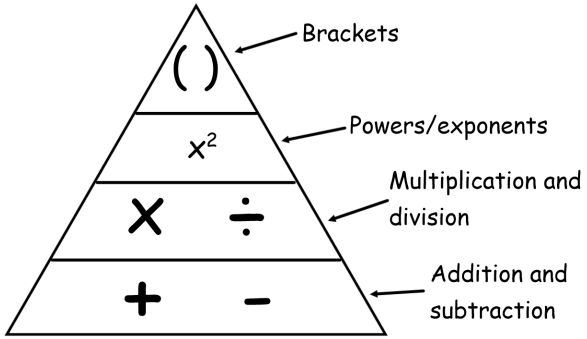
A Christmas Carol, Charles Dickens

'Hard and sharp as flint […] as solitary as an oyster'	The adjectives 'hard' and 'sharp' imply Scrooge has a tough exterior, but the simile 'as flint' suggests if hit hard enough it could spark a fire inside to create change. The simile comparing him to an oyster emphasises this by focusing on a hard exterior that if cracked open, may hold a pearl (something of beauty).
'If they would rather die, they had better do it, and decrease the surplus population'	Scrooge shows his callous, selfish attitude towards the poor by viewing them as better off dead and simply a 'surplus', viewing them in monetary terms as opposed to human beings.
'I wear the chain I forged in life…The chain was made up of cash boxes…ledgers…heavy purses'	Marley's Ghost tells Scrooge than unless he changes he will have a chain holding him to the earth, forged by his sins 'boxes, ledgers, purses' (money). This is used to scare Scrooge and make him realise where his sins lie.
'A solitary child, neglected by his friends is left there still – Scrooge sobbed'	The Ghost of Christmas Past shows Scrooge his time as a child at school, and Scrooge shows a moment of emotion . The reader is given a reason to sympathise with Scrooge, and Scrooge is given a reminder of who he was and how he felt.
'They are Man's. This boy is ignorance. This girl is Want. Beware for I see that written which is Doom.'	Dickens explains that Mankind's ignorance and want has poisoned them, and that ignorance especially will cause 'Doom'. This summarises his message to the upper class, that their ignorance will lead to the death of people and ultimately society.
'It was shrouded in a deep black garment… left nothing visible except one outstretched hand.'	The Ghost of Christmas Yet to Come does not speak to Scrooge, as Scrooge must decide to change by himself and without guidance. He is dressed as the Grim Reaper to emphasise that ultimately Scrooge will end up dead and without mourners if he does not change.
'I will honour Christmas in my heart. I will live in the Past, the Present and the Future. I will not shut out the lessons that they teach'	By Stave 5, Scrooge is a changed man and promises to keep the lessons of all three Ghosts in his heart. The repetition of 'I will' shows that he has changed and that he now has a more positive and charitable attitude in life.

An Inspector Calls, J. B. Priestley

'The Titanic – she sails next week…and unsinkable, absolutely unsinkable.'	Mr Birling uses the titanic as a symbol of how capitalism is supreme, but Priestley uses dramatic irony as the audience is aware that it is hit by an iceberg and sinks. This is a metaphor for the family's future in the play, but also their selfish belief in capitalism,
"But these girls aren't cheap labour- they're people."	Sheila shows that unlike her father she is able to change and begins to see those in a lower class as people, not commodities.
"If we were all responsible for everything that happened to everybody we'd had anything to do with, it would be very awkward, wouldn't it?"	Mr Birling's capitalistic attitude is conflicted by Priestley and Inspector Goole's belief that society should work as a community and take responsibility for one another. He views this as 'awkward'.
"Why shouldn't they try for higher wages? We try for the highest possible prices"	Eric, as part of the younger generation, is also different from his father, showing how the young can change and take responsibility for their actions.
"I'm sorry she should have come to such a horrible end. But I accept no blame at all"	Mrs Birling as part of the older more entrenched upper class is unable to take responsibility for her actions and the effect it has on others.
'The point is, you don't seem to have learnt anything.'	At the end, when the Inspector leaves and they begin to question his existence, Sheila tells them that they have not learned the lessons the inspector has tried to teach, that their capitalistic and selfish attitude has led to the death of a vulnerable woman.
We don't live alone. We are members of one body. We are responsible for each other. And I tell you that the time will soon come when, if men will not learn that lesson, then they will be taught it in fire and blood and anguish.	The repetition of 'we' emphasises how society needs to work as a collective, as 'one body' . Priestley uses dramatic irony again here as 'fire and blood and anguish' refers to the death and destruction of WW1 and WW2. By believing in socialism and not capitalism, Priestley is arguing that society can avoid future conflict and pain.

Order of Operations



Inverse Operations

+ ⟷ −

× ⟷ ÷

$\square^2$ ⟷ $\sqrt{\square}$

$\square^3$ ⟷ $\sqrt[3]{\square}$

Square Numbers

1 x 1 or 1^2 = 1
2 x 2 or 2^2 = 4
3 x 3 or 3^2 = 9
4 x 4 or 4^2 = 16
5 x 5 or 5^2 = 25
6 x 6 or 6^2 = 36
7 x 7 or 7^2 = 49
8 x 8 or 8^2 = 64
9 x 9 or 9^2 = 81
10 x 10 or 10^2 = 100
11 x 11 or 11^2 = 121
12 x 12 or 12^2 = 144

Cube Numbers

$1^3 = 1 \times 1 \times 1 = 1$
$2^3 = 2 \times 2 \times 2 = 8$
$3^3 = 3 \times 3 \times 3 = 27$
$4^3 = 4 \times 4 \times 4 = 64$
$5^3 = 5 \times 5 \times 5 = 125$

Written methods

Multiplication (Grid method)

26 x 5

×	20	6
5	100	30

The 26 is broken into 20 and 6. These numbers are multiplied as shown.

The results are then added, 100 + 30 = 130.

Division (Bus stop)

186 ÷ 6

$$\begin{array}{r} 0\ 3\ 1 \\ 6\overline{)\,1\ {}^{1}8\ 6} \end{array}$$

6 doesn't divide into 1, so the 1 carries.
6 divides into 18, 3 times.
6 divides into 6, once.

Multiplying Integers

If the signs are the same, the result is positive.

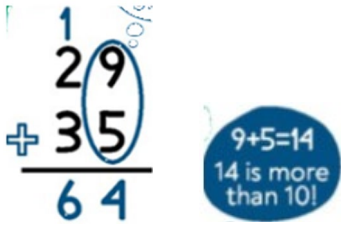
+ × + = + − × − = +

+ × − = − − × + = −

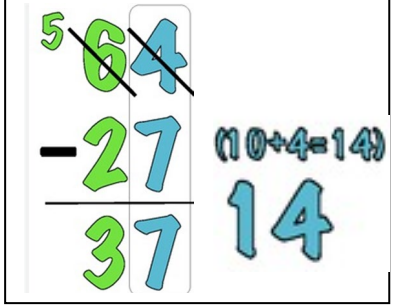
Adding Negative Numbers

+ add +	Add the numbers; end result is a positive E.g. 3 + 5 = 8
+ add −	Find the difference between the numbers; end result takes the sign of the number with largest magnitude. E.g. 3 + - 5 = -2
- add -	Add the integers; end result is a negative -3 + -5 = -8

Column Addition



Column Subtraction



Rounding (to different degrees of accuracy)

* 5 and above rounds up *

24.356 To the nearest integer (whole number)

24

24.356 To 3 significant figures (starting at first non-zero digit)

24.4

24.356 To 2 decimal places (digits after the decimal point)

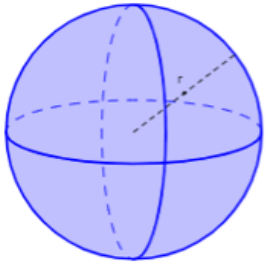
24.36

Draw in your line then check the number to the right

Subject terminology	
Area	The amount of space a 2-dimensional shape takes up
Volume	The amount of 3-dimensional space a solid takes up
Surface area	The total area of all faces of a 3-dimensional shape
Substitute	To replace variables in a formula with numbers
Object	The starting shape, before transformation
Image	The end shape, after transformation
Transformation	The movement or manipulation of an object. The four transformations we use are rotation, reflection, translation and enlargement
Scale factor	The number by which a quantity is multiplied to give another (sometimes written s.f)

Mensuration	
Area of a rectangle	A = width × length
Area of a triangle	A = $\frac{1}{2}$ × base × perpendicular height
Area of parallelogram	A = base × perpendicular height
Area of a trapezium	A = $\frac{1}{2}$ (a + b) × perpendicular height
Volume of a prism	V = area of base × height

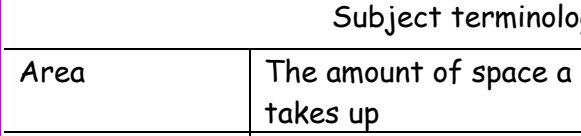
Surface Area and Volume of Sphere



Surface Area = $4\pi r^2$

Volume = $\frac{4}{3}\pi r^3$

Vectors



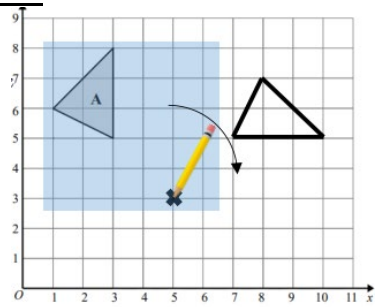
Can be written as column vectors.
Positive values are right and up.
Negative values are left and down.

This is 3 right and 4 down.

$\begin{pmatrix} 4 \\ 1 \end{pmatrix}$

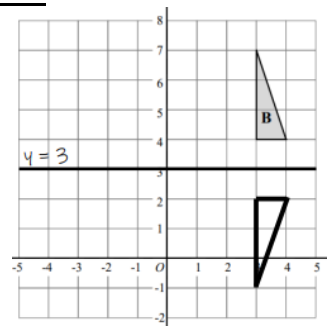
This is the vector
It goes 4 right and 1 up.

Rotation



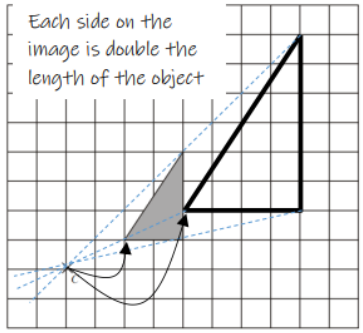
Draw the object onto tracing paper, rotate the given number of degrees around the centre of rotation and then redraw the image.

Reflection



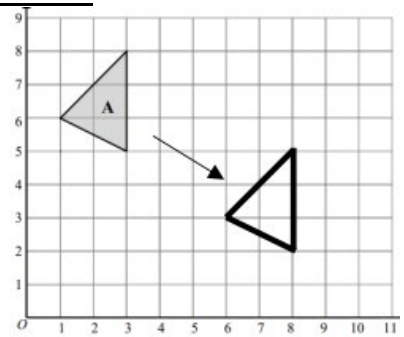
Draw in the line of reflection. Reflect each point of the object to the other side of the line to draw the image.

Enlargement



Count from the centre of enlargement to each vertex of the object, multiply these by the s.f to draw in the image.

Translation

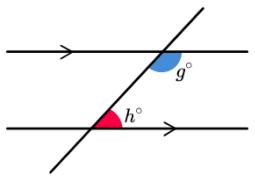


Move each vertex of the object by the vector instruction given, then draw in the image.

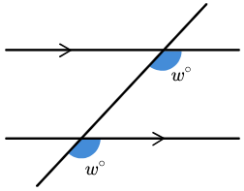
Subject terminology –

Vertically Opposite angles	Angles that are opposite one another at a specific vertex and are created by two straight intersecting lines. Vertically opposite angles are equal to each other. These are sometimes called vertical angles.
Corresponding angles	Corresponding angles in parallel lines are angles that occur on the same side of the transversal line and are equal in size. They are either both obtuse or both acute.
Alternate angles	Alternate angles in parallel lines are angles that occur on opposite sides of the transversal line and have the same size.
Co-interior angles	Co-interior angles in parallel lines occur in between two parallel lines when they are intersected by a transversal. The two angles that occur on the same side of the transversal always add up to 180°.
Transversal	A line cutting two parallel lines in half
Congruent	The same shape and size, that can be flipped, slid, or turned.
Similar	A shape that can be reflected, rotated, and resized proportionately
Scale Factor	The ratio of sizes of two similar figures

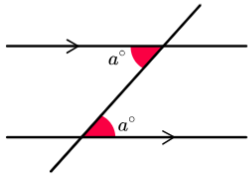
- Co-interior angles add up to 180^{o}:



- Corresponding angles are equal:



- Alternate angles are equal:



Similar Shapes: Scale Factors (SF)

Length Ratio

$2^1 : 3^1$

2 : 3

SF

$3 \div 2 = 1.5$

Area Ratio

$2^2 : 3^2$

4 : 9

SF

$9 \div 4 = 2.25$

Volume Ratio

$2^3 : 3^3$

8 : 27

SF

$27 \div 8 = 3.375$

How to : Scale Factor

	A : B
Length Ratio =	2 : 3
Area Ratio =	4 : 9
Volume Ratio =	8 : 27

Length

$x = 1 \times 1.5$

$x = 1.5cm$

$y = 4 \times 1.5$

$y = 6cm$

Area

$Face\ A = 2cm^2$

$Face\ B = 2 \times 2.25$

$Face\ B = 4.5cm^2$

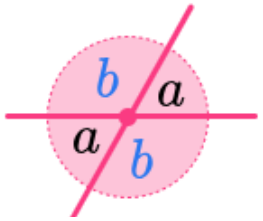
Volume

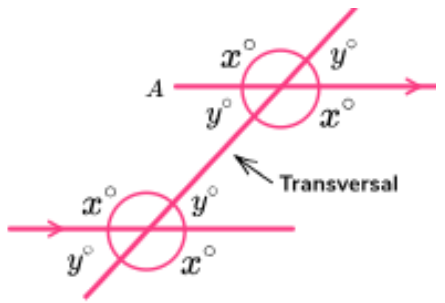
$Shape\ A = 8cm^3$

$Shape\ B = 8 \times 3.375$

$Shape\ B = 27cm^3$

Vertically opposite angles are equal

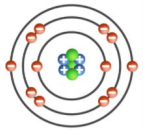




Subject: Science - Chemistry Topic: Chemistry Paper 1

Development of the atomic theory

J.J Thompsons's discovery of the electron led to the plum pudding model of the atom.



Bohr discovered that electrons orbit the nucleus.

Chadwick provided the evidence to show the existence of neutrons within the nucleus

Group 1 & 7 reactivity

Group 1

Li
Na
K
Rb
Cs
Fr

Reactivity increases down the group

This is because... the outer electron is getting further away from the nucleus

This means the attraction is lower

The outer electron is easier to lose

Group 7

F
Cl
Br
I
At
Ts

Reactivity increases up the group

This is because... the outer electron is getting closer to the nucleus

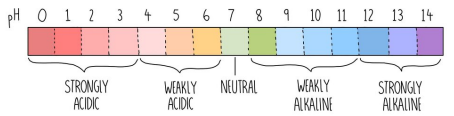
This means the attraction is higher

It is easier to gain an electron

Subject Terminology

Key Word	Definition
Intermolecular forces	Weak forces of attraction between covalent molecules.
Electrostatic attraction	Forces of attractions between oppositely charged ions.
Atomic Mass	The number of protons and neutrons in the nucleus of an atom

Acid, Alkali and Neutralisation



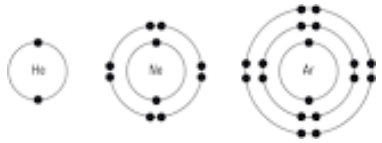
Acids produce hydrogen ions, H^+.
Alkalis produce hydroxide ions, OH^-.

When an acid reacts an alkali, a **neutralisation** reaction occurs to form water.

$H^+(aq) + OH^-(aq) \rightarrow H_2O(l)$

Atoms

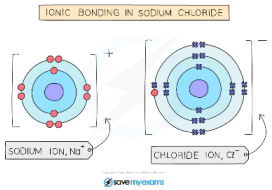
Name of particle	Relative charge	Relative mass
Proton	+1	1
Neutron	0	1
Electron	–1	Very small

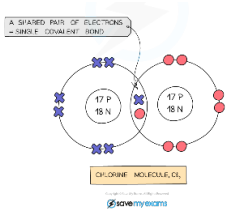


Isotopes of the same element have the same number of protons but different number of neutrons.

Bonding

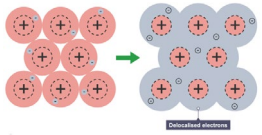
An ionic bond is the strong **electrostatic** force of attraction between oppositely charged ions.





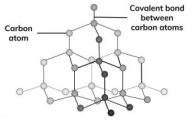
In a covalent bond two or more **non-metal** atoms will share electrons to fill their outer shell.

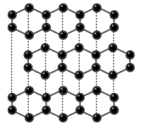
A metallic bond is the strong **electrostatic** forces of attraction between **delocalised** electrons and metal ions



Giant covalent structures:

Diamond: each carbon atom is joined to 4 other carbon atoms by strong covalent bonds.
Graphite: each carbon atom forms 3 covalent bonds with other carbon atoms. The carbon atoms form layers of hexagonal rings.





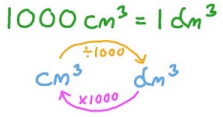
Chemical Calculations

RELATIVE FORMULA MASS (M_r)

ADD TOGETHER THE RELATIVE ATOMIC MASSES OF ALL THE ATOMS IN THAT COMPOUND'S MOLECULAR FORMULA

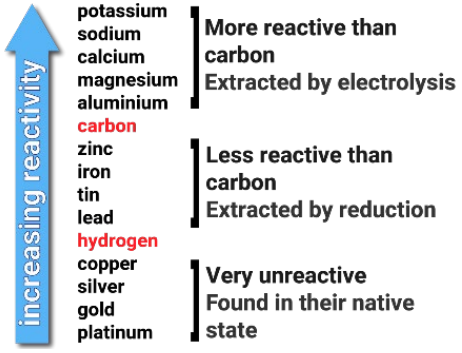
$$\%\ mass\ of\ element = \frac{A_r \times number\ of\ atoms\ of\ the\ element}{M_r\ of\ the\ compound} \times 100$$

Concentration = mass÷ volume



Subject: Science - Chemistry Topic: Chemistry Paper 1

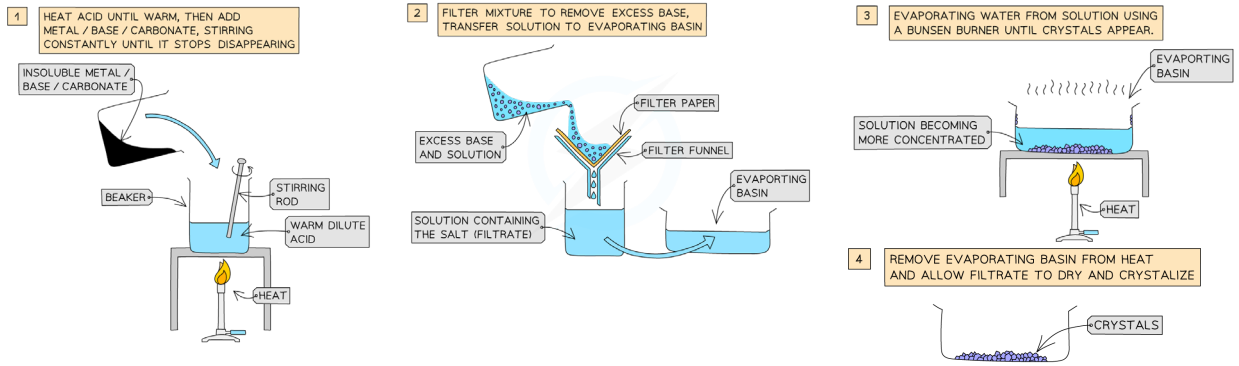
Reactivity



The reactivity series allows us to predict how metals will react.

A more reactive metal will displace a less reactive metal from a compound.

Required practical – making a pure dry sample of a soluble salt



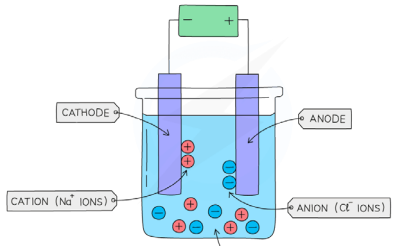
Metal reactions

METAL + ACID ⟶ SALT + HYDROGEN

METAL + WATER ⟶ METAL HYDROXIDE + HYDROGEN

METAL + OXYGEN ⟶ METAL OXIDE

Electrolysis



Electrolysis is the breaking down a substance containing ions using electricity.

When a charge is set up the ions will move to the oppositely charged electrode.

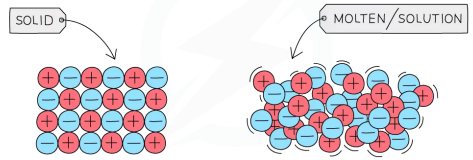
To remember the name of the electrodes:

- Positive is the
- Anode
- Negative
- Is the
- Cathode

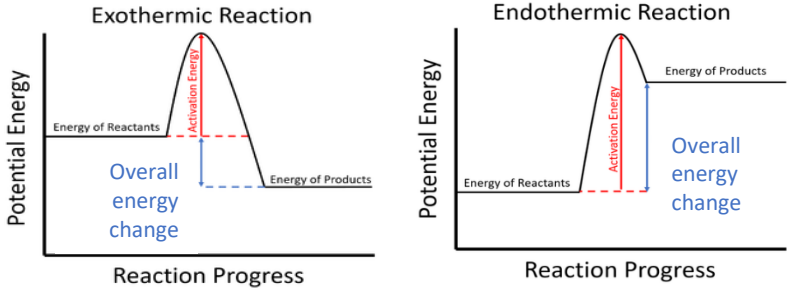
Is it oxidation or reduction?

- Oxidation
- Is the
- Loss (of electrons)
- Reduction
- Is the
- Gain (of electrons)

Only molten ionic substances or solutions can conduct electricity



Endothermic and exothermic reactions

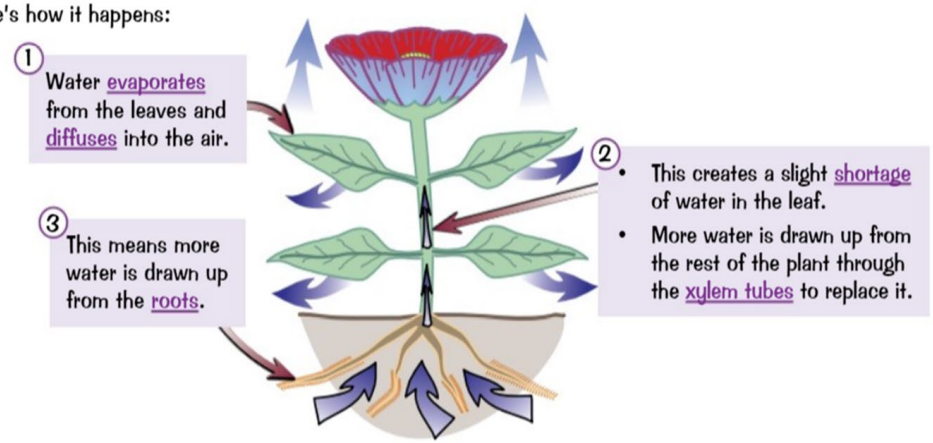


Subject Terminology	Definition
Electrolysis	The decomposition (breakdown) of a compound using an electric current
Electrolyte	A substance which, when molten or in solution, will conduct an electric current
oxidation	The gain of oxygen, or loss of electrons during a chemical reaction.
reduction	The loss of oxygen, gain of electrons during a chemical reaction.
Exothermic reaction	A reaction that transfers energy from the system to the surroundings
Endothermic reaction	A reaction that transfers energy from the surroundings to the system.

Subject: Science - Biology Topic: Biology Paper 1

Transpiration is the Loss of Water from the Plant

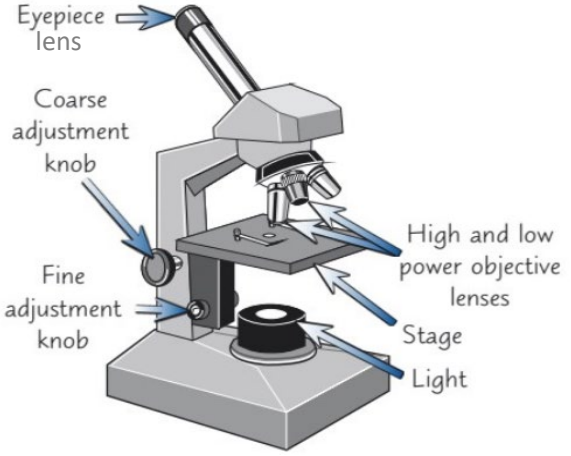
1) Transpiration is caused by evaporation and diffusion of water from a plant's surface (mainly the leaves).
2) Here's how it happens:



3) There's a constant stream of water through the plant. This is called the transpiration stream.

Microscopes core knowledge

Magnification = Image Size / Actual Image



Using a microscope method

1. Clip the slide to the stage
2. Start with the lowest magnification objective lens
3. Twist the coarse adjustment knob to move the stage up to just below the lens
4. Move the stage down until the image is in focus
5. Move the fine adjustment knob to get a clear image

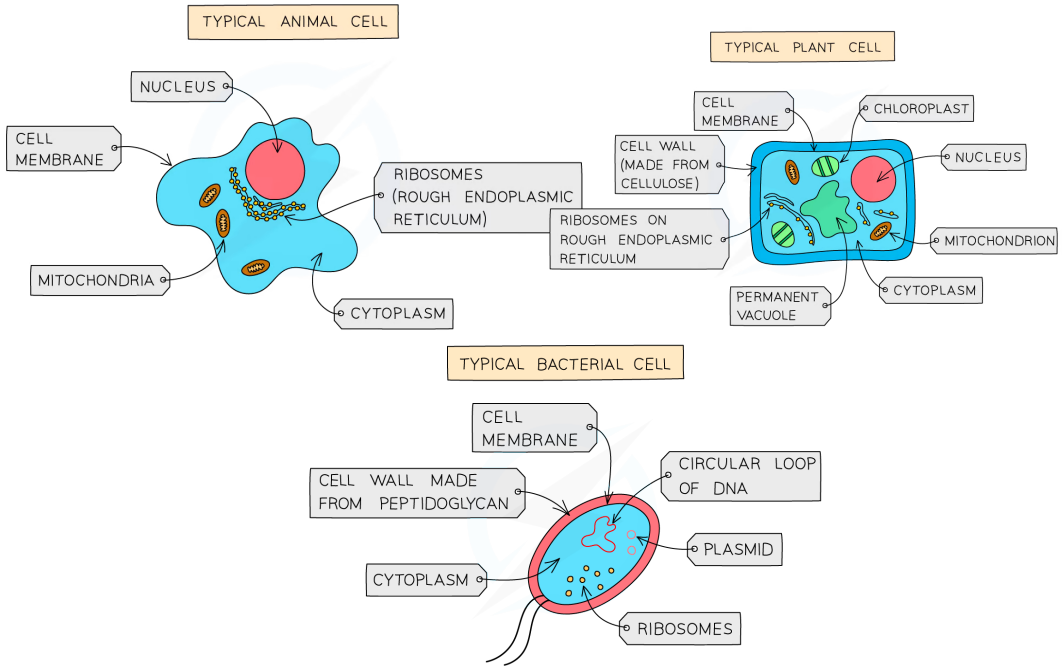
Length can have lots of units, including m, mm, and μm.

m ⇄ mm ⇄ μm (× 1000 / ÷ 1000)

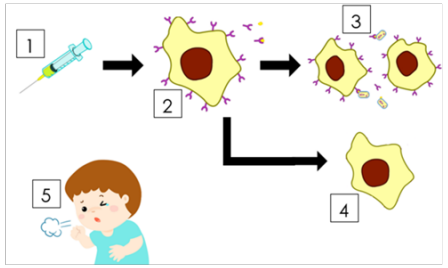
MULTIPLY to go from a bigger unit to a smaller unit.

Subject Terminology

Key Word	Definition
Resolution	The ability to distinguish between 2 points on a picture
Transpiration	The evaporation of water from a leaf through the stomata
Communicable disease	A disease that can be transmitted from person to person
Vaccine	A dead or inactive pathogen used in vaccination to develop immunity to a disease



How a vaccination works



1. Vaccination given
Injected with a small amount of dead or inactive pathogen

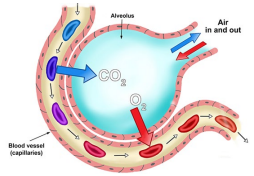
2. Antibodies produced
White blood cells produce antibodies to attack antigens

3. Attract more white blood cells
More white blood cells produce antibodies

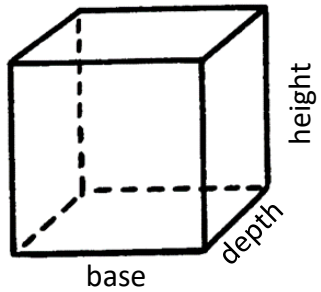
4. Memory cells
These cells stay in the blood in case we are infected in the future Infection with same pathogen later on

5. **White blood cells can quickly respond** and produce antibodies to kill pathogens

Exchange surfaces and specialised cells

Specialised cell / exchange surface	Function	Adaptations
Alveoli 	Gas exchange in the lungs. Oxygen moves into the blood and carbon dioxide moves out	Large surface area Short diffusion pathway Steep diffusion gradient
Root hair cells 	To absorb water and minerals from the soil in plants	Large surface area Short diffusion pathway Steep diffusion gradient

Surface area to volume ration of a cube



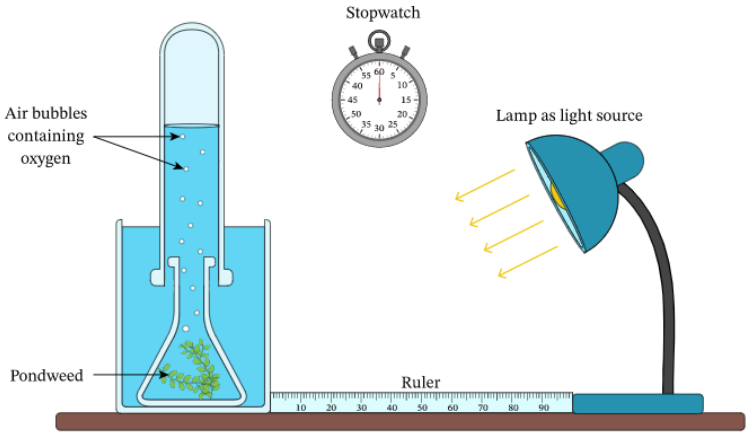
1. Calculate the surface area of 1 side of the cube by using base x height
2. A cube has 6 sides so to calculate the total surface area x the surface area of one side by 6.
3. Calculate the volume of the cube by doing base x height x width
4. Now divide surface area by the volume to get the ratio

Subject Terminology

Key Word	Definition
Photosynthesis	The process by which plants make glucose using carbon dioxide and water and energy from light
Limiting factor	Anything that slows down the rate of photosynthesis
Diffusion	The movement of particles from an area of high to low concentration
Alveoli	Tiny air sacs found in lungs that maximise the rate of gas exchange

Photosynthesis key practical

1. Set up a test tube rack containing a boiling tube at a distance of 10 cm away from the light source
2. Fill the boiling tube with the sodium hydrogen carbonate solution.
3. Place the piece of pondweed into the boiling tube with the cut end uppermost. Gently push the pondweed down with the glass rod.
4. Leave the boiling tube for 5 minutes.
5. Start the stop watch and count the number of bubbles produced in one minute
6. Record the results in a table
7. Repeat the count twice more so that the mean number of bubbles per minute can be calculated.
8. Move the test tube rack to a distance of 20 cm from the light source and repeat steps 4–6.
9. Repeat using distances of 30 cm and 40 cm between the test tube rack and the light source.



Independent variable = Light intensity

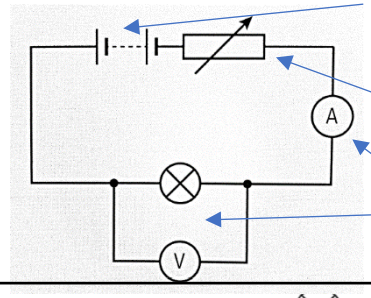
Dependent variable = Number of bubbles per minute

Control variables = Temperature (L.E.D), concentration of sodium hydrogen carbonate solution, same pondweed cutting

Subject: Science - Physics Topic: Physics Combined Science Paper 1

Electricity

Investigating circuit components required practical

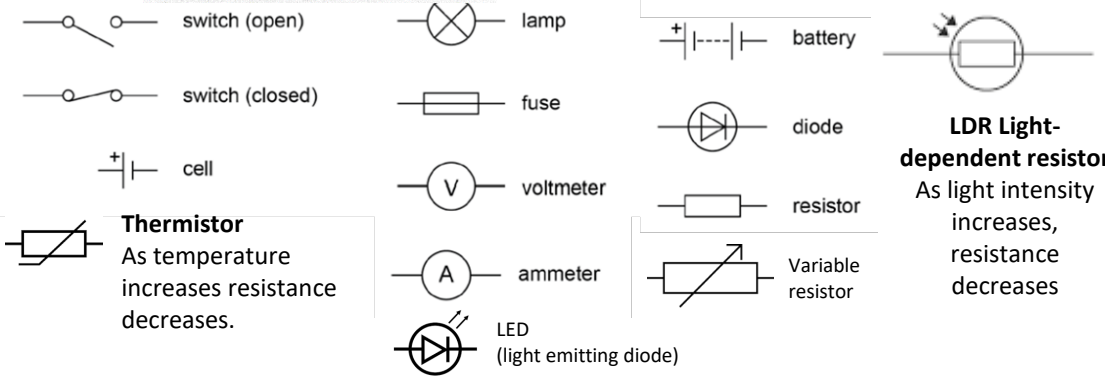


Swap the wires at the power supply to get negative readings.

Variable resistor to get 5 current and potential difference readings.

Ammeter connected in **series**

Voltmeter connected in **parallel**

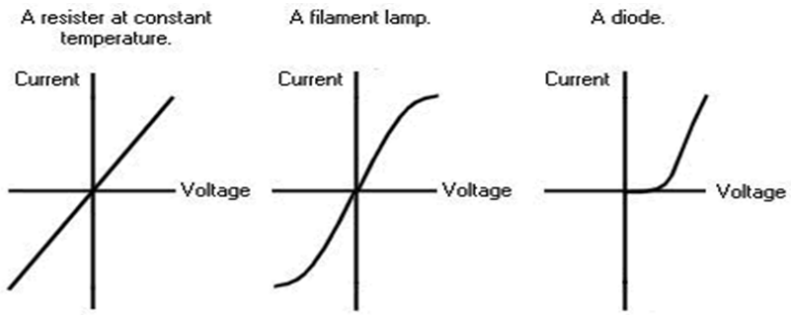


Thermistor
As temperature increases resistance decreases.

LDR Light-dependent resistor
As light intensity increases, resistance decreases

IV graphs for circuit components

This graph shows a **directly proportional relationship** as the line of best fit is a **straight line through the origin**.
This is an **Ohmic conductor.**



These are non-ohmic conductors as there is not a directly proportional relationship.

Equations to learn

Symbol equation	Word equation
P = I V	Power = current x potential difference
$P = I^2 R$	Power = current^2 x resistance
Q = I t	Charge flow = current x time
E = P t	Energy = power x time
	Efficiency = $\frac{\text{useful energy output}}{\text{total energy input}}$
V = I R	Potential difference = current x resistance
E = Q V	Energy = charge flow x potential difference
$E_p = m g h$	Gravitational potential energy = mass x gravitational field strength x change in height

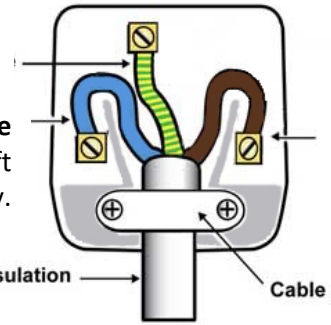
Electricity in the Home

Mains electricity is alternating current (AC).
This means the potential difference changes direction.

Mains frequency = 50Hz
Mains potential difference = 230V

Earth Wire
Green and Yellow
Prevents the appliance becoming live.

Neutral Wire
B**L**ue to the **L**eft
Completes the circuity.



Live Wire
B**R**own to the **R**ight
Provides the AC potential difference.

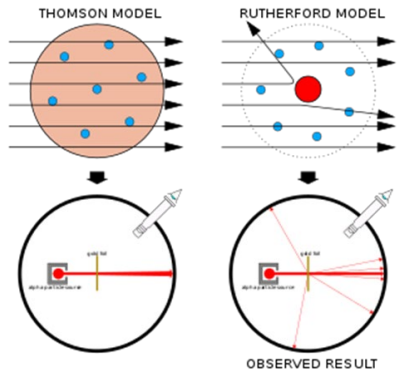
Subject: Science - Physics Topic: Physics Combined Science Paper 1

Radioactivity

	Structure	Ionising Power	Stopped by
Alpha	2 protons 2 neutrons	Strong	Paper, skin
Beta	Fast moving electron	Moderate	A few mm of aluminium
Gamma	Electromagnetic wave	Weak	Thick lead or concrete

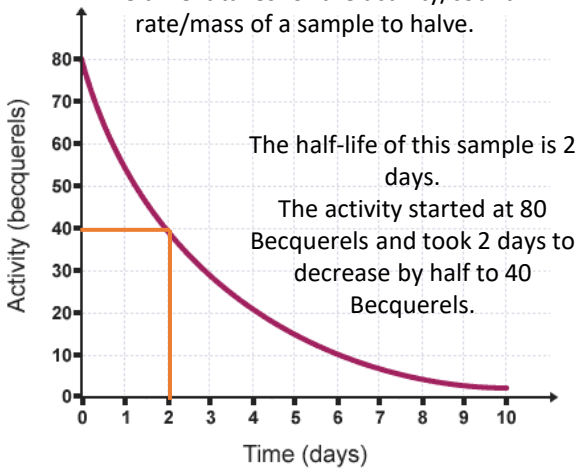
Rutherford's alpha scattering experiment
Disproved the plum pudding model

1. Alpha particles were fired at very thin gold foil
2. They expected the alpha particles to pass straight through because the positive charge was evenly distributed through the atom.
3. The actual result was that most went through the gold foil but some alpha particles were partially deflected, some particles bounced straight back.
4. They decided there must be something dense and positive in the centre of the atom (the nucleus)

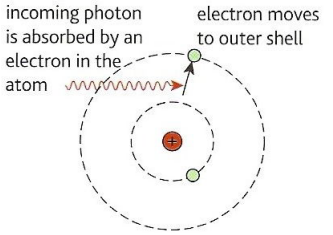


Half –life

The time it takes for the activity/count rate/mass of a sample to halve.



The half-life of this sample is 2 days.
The activity started at 80 Becquerels and took 2 days to decrease by half to 40 Becquerels.



Ionisation vs Excitation

Excitation: an electron absorbs energy and moves to a higher energy level.

Ionisation: an electron is removed from the atom.

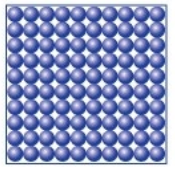
Energy stores
- Gravitational potential energy – stored in objects raised off the Earth's surface (due to their position on Earth)
- Kinetic energy – stored in a moving object
- Thermal energy – stored in hot objects
- Chemical energy – stored in fuel, batteries, foods
- Elastic potential energy – stored in objects that are stretched or squashed

Energy transfers
- Mechanical – when an object is moved by a force
- Sound, Light – By radiation/waves
- Electrical – By heating

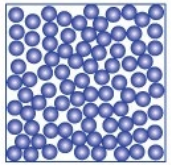
Subject Terminology	
Key Word	**Definition**
Repeatability	Measurements are repeatable when repeated by the same person, using the same method and give similar results.
Reproducibility	Measurements are reproducible if similar results are obtained by different investigators with different equipment.
Zero error	Caused when equipment is not set to zero
Random error	Results vary in unpredictable ways, reduce random error by taking repeats and calculating a mean.
Anomalous result	A result that does not fit the pattern. Ignore anomalous results when calculating a mean.
Non -renewable	An energy resource that cannot be replenished.
Renewable	An energy resource that can be replenished.

Arrangement and Behaviour of solids liquids and gases

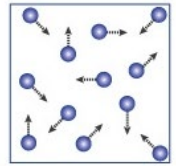
Solid particles are :
Tightly packed, regular pattern, most dense, vibrate around fixed positions, have the least internal energy, strong bonds between the particles



Liquid particles are:
Very close, random arrangement, dense, move freely over each other, have more energy than solids, less energy than gases, weak bonds between the particles



Gas particles are:
far apart, randomly arranged, least dense, move randomly in all directions, have the most energy, have no bonds between the particles



Relief of the UK

Relief of the UK can be divided into uplands and lowlands. Each have their own characteristics.

Key

Lowlands

Uplands

Areas +600m: Peaks and ridges cold, misty and snow common. i.e. Scotland

Areas - 200m: Flat or rolling hills. Warmer weather. i.e. Fens

Types of Erosion

The break down and transport of rocks – smooth, round and sorted.

Attrition	Rocks that bash together to become smooth/smaller.
Solution	A chemical reaction that dissolves rocks.
Abrasion	Rocks hurled at the base of a cliff to break pieces apart.
Hydraulic Action	Water enters cracks in the cliff, air compresses, causing the crack to expand.

Types of Transportation

A natural process by which eroded material is carried/transported.

Solution	Minerals dissolve in water and are carried along.
Suspension	Sediment is carried along in the flow of the water.
Saltation	Pebbles that bounce along the sea/river bed.
Traction	Boulders that roll along a river/sea bed by the force of the flowing water.

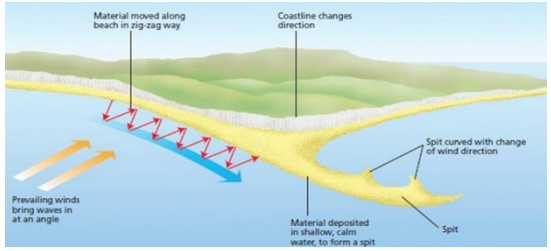
Mass Movement

A large movement of soil and rock debris that moves down slopes in response to the pull of gravity in a vertical direction.

1	Rain saturates the permeable rock above the impermeable rock making it heavy.
2	Waves or a river will erode the base of the slope making it unstable.
3	Eventually the weight of the permeable rock above the impermeable rock weakens and collapses.
4	The debris at the base of the cliff is then removed and transported by waves or river.

Formation of Coastal Spits - Deposition

Example: Spurn Head, Holderness Coast.

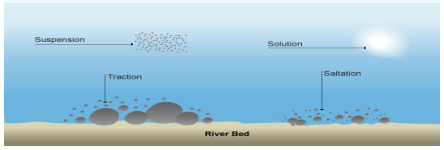


1) Swash moves up the beach at the angle of the prevailing wind.
2) Backwash moves down the beach at 90° to coastline, due to gravity.
3) Zigzag movement (Longshore Drift) transports material along beach.
4) Deposition causes beach to extend, until reaching a river estuary.
5) Change in prevailing wind direction forms a hook.
6) Sheltered area behind spit encourages deposition, salt marsh forms.

Types of Weathering

Weathering is the breakdown of rocks where they are.

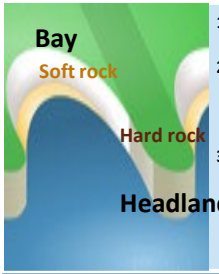
Carbonation	Breakdown of rock by changing its chemical composition.
Mechanical	Breakdown of rock without changing its chemical composition.



What is Deposition?

When the sea or river loses energy, it drops the sand, rock particles and pebbles it has been carrying. This is called deposition.

Formation of Bays and Headlands



1) Waves attack the coastline.
2) Softer rock is eroded by the sea quicker forming a bay, calm area cases deposition.
3) More resistant rock is left jutting out into the sea. This is a headland and is now more vulnerable to erosion.

Unit 1c

Physical Landscapes in the UK

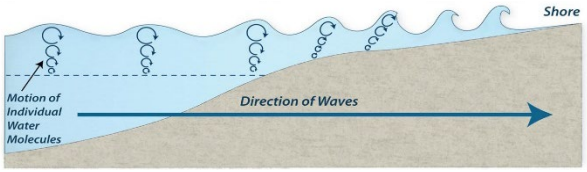
AQA

How do waves form?

Waves are created by wind blowing over the surface of the sea. As the wind blows over the sea, friction is created - producing a swell in the water.

Why do waves break?

1	**Waves start out at sea.**
2	**As waves approaches the shore, friction slows the base.**
3	**This causes the orbit to become elliptical.**
4	**Until the top of the wave breaks over.**



Mechanical Weathering Example: Freeze-thaw weathering

Stage One

Water seeps into cracks and fractures in the rock.

Stage Two

When the water freezes, it expands about 9%. This wedges apart the rock.

Stage Three

With repeated freeze-thaw cycles, the rock breaks off.

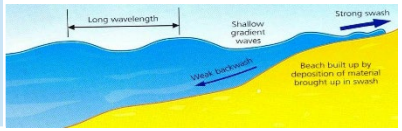
Size of waves

- **Fetch how far the wave has travelled**
- **Strength of the wind.**
- **How long the wind has been blowing for.**

Types of Waves

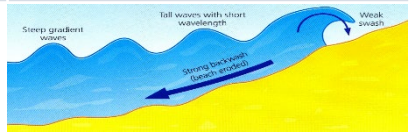
Constructive Waves

This wave has a **swash that is stronger** than the backwash. This therefore builds up the coast.

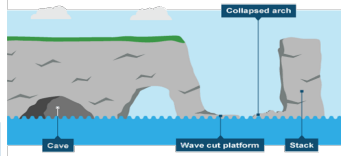


Destructive Waves

This wave has a **backwash that is stronger** than the swash. This therefore erodes the coast.



Formation of Coastal Stack



Example: Old Harry Rocks, Dorset

1) Hydraulic action widens cracks in the cliff face over time.
2) Abrasion forms a wave cut notch between HT and LT.
3) Further abrasion widens the wave cut notch to from a cave.
4) Caves from both sides of the headland break through to form an arch.
5) Weather above/erosion below –arch collapses leaving stack.
6) Further weathering and erosion eaves a stump.

Coastal Defences

Hard Engineering Defences

Groynes	**Wood barriers prevent longshore drift, so the beach can build up.**	✓ **Beach still accessible.** ✗ **No deposition further down coast = erodes faster.**
Sea Walls	**Concrete walls break up the energy of the wave . Has a lip to stop waves going over.**	✓ **Long life span** ✓ **Protects from flooding** ✗ **Curved shape encourages erosion of beach deposits.**
Gabions or Rip Rap	**Cages of rocks/boulders absorb the waves energy, protecting the cliff behind.**	✓ **Cheap** ✓ **Local material can be used to look less strange.** ✗ **Will need replacing.**

Soft Engineering Defences

Beach Nourishment	**Beaches built up with sand, so waves have to travel further before eroding cliffs.**	✓ **Cheap** ✓ **Beach for tourists.** ✗ **Storms = need replacing.** ✗ **Offshore dredging damages seabed.**
Managed Retreat	**Low value areas of the coast are left to flood & erode.**	✓ **Reduce flood risk** ✓ **Creates wildlife habitats.** ✗ **Compensation for land.**

Case Study: Holderness Coast

Location and Background
Located on the coast of the East Riding of Yorkshire. It stretched from Flamborough Head in the north to Spurn Point in the south. It has a number of small towns and villages including Bridlington and Hornsea.

Geomorphic Processes
- The Holderness Coast experiences all of the coastal processes but most noticeably erosion. This is due to the boulder clay sediment that makes up the majority of the coast. This sediment easily eroded.
- There is also high levels of longshore drift which exacerbate the erosion issues.

Management
-Groynes are low walls built out into the sea, usually at right angles to the coastline. They help break the power of the incoming waves and slow down the process of longshore drift.
-Rock walls, stop waves removing sand and gravel from the beach.
-Sea wall are usually made of concrete and deflect the waves energy back out to sea.
-Beach building builds up beaches to reduce the power of the waves

Water Cycle Key Terms

Precipitation	Moisture falling from clouds as rain, snow or hail.
Interception	Vegetation prevent water reaching the ground.
Surface Runoff	Water flowing over surface of the land into rivers
Infiltration	Water absorbed into the soil from the ground.
Transpiration	Water lost through leaves of plants.

Physical and Human Causes of Flooding.

***Physical:* Prolong & heavy rainfall**
Long periods of rain causes soil to become saturated leading runoff.

***Physical:* Geology**
Impermeable rocks causes surface runoff to increase river discharge.

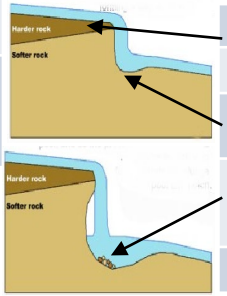
***Physical:* Relief**
Steep-sided valleys channels water to flow quickly into rivers causing greater discharge.

***Human:* Land Use**
Tarmac and concrete are impermeable. This prevents infiltration & causes surface runoff.

Upper Course of a River

Near the source, the river flows over steep gradient from the hill/mountains. This gives the river a lot of energy, so it will erode the riverbed vertically to form narrow valleys.

Formation of a Waterfall



1) River flows over alternative types of rocks.

2) River erodes soft rock faster creating a step.

3) Further hydraulic action and abrasion form a plunge pool beneath.

4) Hard rock above is undercut leaving cap rock which collapses providing more material for erosion.

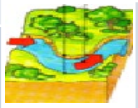
5) Waterfall retreats leaving steep sided gorge.

Middle Course of a River

Here the gradient get gentler, so the water has less energy and moves more slowly. The river will begin to erode laterally making the river wider.

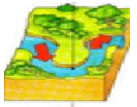
Formation of Ox-bow Lakes

Step 1



Erosion of outer bank forms river cliff. Deposition inner bank forms slip off slope.

Step 2

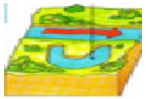


Further hydraulic action and abrasion of outer banks, neck gets smaller.

Step 3

Erosion breaks through neck, so river takes the fastest route, redirecting flow

Step 4



Evaporation and deposition cuts off main channel leaving an oxbow lake.

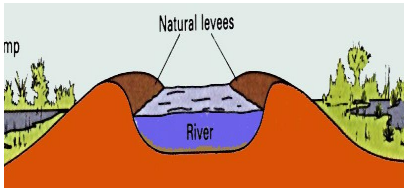
Lower Course of a River

Near the river's mouth, the river widens further and becomes flatter. Material transported is deposited.

Formation of Floodplains and levees

When a river floods, fine silt/alluvium is deposited on the valley floor. Closer to the river's banks, the heavier materials build up to form natural levees.

✓ Nutrient rich soil makes it ideal for farming.
✓ Flat land for building houses.



River Management Schemes

Soft Engineering

Afforestation – plant trees to soak up rainwater, reduces flood risk.
Demountable Flood Barriers put in place when warning raised.
Managed Flooding – naturally let areas flood, protect settlements.

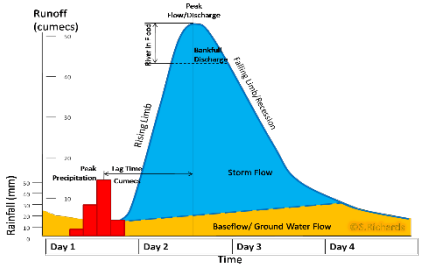
Hard Engineering

Straightening Channel – increases velocity to remove flood water.
Artificial Levees – heightens river so flood water is contained.
Deepening or widening river to increase capacity for a flood.

Hydrographs and River Discharge

River discharge is the volume of water that flows in a river. Hydrographs who discharge at a certain point in a river changes over time in relation to rainfall

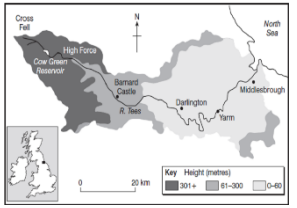
1. **Peak discharge** is the discharge in a period of time.
2. **Lag time** is the delay between peak rainfall and peak discharge.
3. **Rising limb** is the increase in river discharge.
4. **Falling limb** is the decrease in river discharge to normal level.



Case Study: The River Tees

Location and Background
Located in the North of England and flows 137km from the Pennines to the North Sea at Red Car.

Geomorphic Processes
Upper – Features include V-Shaped valley, rapids and waterfalls. High Force waterfall drops 21m and is made from harder Whinstone and softer limestone rocks. Gradually a gorge has been formed.
Middle – Features include meanders and ox-bow lakes. The meander near Yarm encloses the town.
Lower – Greater lateral erosion creates features such as floodplains & levees. Mudflats at the river's estuary.



Management
-Towns such as Yarm and Middleborough are economically and socially important due to houses and jobs that are located there.
-Dams and reservoirs in the upper course, controls river's flow during high & low rainfall.
- Better flood warning systems, more flood zoning and river dredging reduces flooding.

Half-Term 4 History Topic: Surgery – Medicine through Time.

Medieval (1250 – 1500) Surgery

The Middle Ages was a period of intense warfare. This gave field surgeons the opportunity to practice and to develop new theories and techniques. However, because of the lack of effective antiseptics and anaesthetics, surgery remained basic and a last resort.

Surgical training:	**Barber surgeons** were surgeons who learned through apprenticeships and who didn't go to university. Many surgeons gained experience on the **battlefield as field surgeons**.
Available treatments:	Barber surgeons could perform **minor surgery**, such as bloodletting, removing small tumours or deal with dislocated limbs. Most ordinary people avoided surgery as much as possible. Battlefield surgery usually involved **amputation** although it did develop in some areas, such as removal of arrowheads.
Dealing with Pain:	Some herbal anaesthetics, such a mandrake, opium and hemlock were used. Dosage was difficult to get right, making their use dangerous. Usually the patient was held down and operations were performed as quickly as possible.
Dealing with infection:	Most medieval surgeons believed that pus was a sign of healing.
Dealing with blood loss	Most major wounds were closed using **cauterisation** which was extremely painful. Islamic surgeon, Abulcasis, began to use **ligatures** to tie vessels shut.

Renaissance (1500 – 1700) Surgery

The Renaissance was a period of frequent warfare. This gave many field surgeons the chance to practice and develop new techniques. However, during this period effective anaesthetics and anti-septic's were still unavailable. As a result for most ordinary people surgery remained basic and a last resort.
There was significant progress **in anatomy and dissection** due to the work of individuals such as Vesalius and Harvey. Many of the advances spread due to the **printing press**, which **allowed books to be published quickly and cheaply**.

Andreas Vesalius – Professor of Surgery at the University of Padua in Italy. Contributed to the development of anatomy.	Ambroise Pare – French Royal surgeon who started his career as an apprentice in a hospital and a field surgeon.
Vesalius dissected humans and proved Galen wrong. He published a book called 'On the Fabric of the Human Body' 1543 which used realism to accurately show the skeleton. Many English surgeons were influenced by his books.	Gunshot wounds were relatively new and treated with boiling oil – 1537 Pare accidentally discovered a more effective way of treating them using egg whites, turpentine and rose oil. He promoted the use of ligatures to tie closed blood vessels and he developed prosthetic limbs for the wounded

C18th – C19th (1700 – 1900) Surgery

Role of Individuals:	Effective Anaesthetics in the 19th Century	Anti-Septic Surgery
John Hunter – 1728 - 1793 • He was a physician and a surgeon. • He worked as a field surgeon. • He focused on advancing anatomical knowledge through dissection. • He wrote several different books about anatomy and disease. • He experimented with ways to avoid surgery by diverting blood vessels. • Demonstrated the importance of the scientific method.	**Anaesthetics** existed before the 19th century, but they were often dangerous or ineffective. Even as effective anaesthetics were developed some people objected to their use. 1842 – Ether used for a successful tooth extraction. However, … Ether was difficult to inhale, highly flammable and could cause vomiting. 1847: **James Simpson** was testing different substances and accidently discovered **Chloroform**. **Queen Victoria** used it during the birth of her son in 1853 and **she recommend it**.	**Joseph Lister** read Pasteur's paper on **Germ Theory** and used it to develop **anti septic surgery.** **Lister** argued that it didn't matter if wounds were exposed to air and oxygen, (questioned both **miasma and spontaneous generation.)** Instead, Lister argued that infection occurred when the skin was **broken and germs got into the wound.** Lister discovered that using bandage soaked in **Carbolic Acid** could stop infections. Lister also proved that anti-septic methods could work in operating theatres. **The acid could be sprayed in the air, on the surgeons' hands, on bandages and on the instruments.**

TECHNICAL VOCABULARY

Field surgeon	A surgeon who works on the battlefield
Blood letting	Removing blood from the body to balance the four humours
Anti-septic surgery	Destroying germs which come in contact with wounds.
Aseptic surgery	Trying to avoid germs coming into contact with wounds.
Anaesthetic	Something which makes a patient unconscious or causes insensitivity to pain.
Amputation	Removing a limb through surgery.
Invasive Surgery	Surgery which goes deep into the body, often involving vital organs.
Compound fracture	An injury when a broken bone pierces the skin
Blood Transfusion	When lost blood is replaced
Skin graft	The transfer of skin from one area of the body to another.
Cauterisation	Burning a wound shut, often with a hot iron.
Ligatures	A thread which is used to tie blood vessels closed.
Anatomy	The knowledge of the body and how it works.
Dissection	Cutting up the body in order to find out or explain how it works.

Modern (1900 -) Surgery

Impact of World War One on Medicine - Between 1914 and 1918 most of the countries in Europe were involved in WW1. - New weapons such as mustard gas and grenades were developed, casing new injuries.	Surgery – - **X-rays** were already being used, but they were in hospitals and could be unreliable. During the war, x-rays were made more reliable and mobile x-ray units were invented. - **Blood transfusions** were already possible but during WW1, it was discovered that Sodium Citrate could be used to store blood over a long period of time. - **Harold Gillies** (an army surgeon) worked with injured soldiers to develop techniques for **plastic surgery**. In particular, he focused on skin grafts. - **The army leg (The Thomas Splint) splint** was developed, which held broken bones in place while they healed.
Impact of World War Two on Medicine - Between 1939 and 1945 most of the countries in Europe went to war again. - Further weapons were developed during this period and medical technology developed with it.	Surgery - - Archibald McIndoe developed **plastic surgery further** through his experiments on the 'guinea pig club' at Queen Victoria's Hospital in London. - The logistics surrounding **blood transfusion** became much more advanced. By 1945 the Blood Transfusion Service was efficient, storing blood and transporting it to where it was needed. - American surgeon Dwight Harken began removing bullets and shrapnel from hearts, **pioneering the first heart surgery.**

The three main problems in surgery were:

Pain – Pain relief was not discovered during the medieval period. Pain was a serious problem as it could cause people to go into shock and die. Main way to try and numb the pain was to give patients alcohol so they would not be conscious.

Infection – Germ Theory not understood in medieval period, therefore surgeons' areas were not kept clean and their tools would not be cleaned in-between patients. There overalls were often covered in the blood of previous patients which would have been spreading germs and causing infection. Many wounds became septic and patients died.

Blood Loss – In war, limbs were often amputated to avoid infection setting into the injury. The problem with amputation was how to control and stop the bleeding once the limb had been removed. A common way to stop the bleeding was to boil oil and ladle it over the wound or to use cauterisation, use a heated iron to burn and close.

Public Health– Medicine through Time

Historical Substantive Concepts

Monarchy

Kings would have had Royal Physicians attached to them. These Royal Physicians would have provided top levels of care and would have been paid well.
The Royal College of Physicians was established in 1518 by King Henry VIII. It played a key role in the development of medical practice and raising standards and shaping public health.

Religion

In the medieval period the Church was very important in the development of medicine.
The Church advocated the care of the "sick and needy".
Furthermore, the majority of Schools and Universities were run by the Church so they were influential in teaching Medicine and Medical practice. Also, hospitals would have been attached to religious buildings.

Invasion

Throughout History there have been numerous invasions for a variety of reasons.
Invasion led to developments in medicine through ideas being shared during the Crusades.
Development in Penicillin was crucial to the allies invasion of Normandy (Operation Overlord) during World War Two.

Political Reform

The government's attitude to public health changed over time and after several epidemics of disease such as cholera they began to realize that they must take further responsibility for public health.
From 1860's onwards the government began to take more action to improve living conditions in cities.

Ideology

The ideas of the cause of disease was based on the ideas of Hippocrates and Galan, doctors from the Greek and Roman periods. The power of the Church continued to influence medieval thinking.

This meant that most people in the medieval period believed the Theory of the Four Humors, Miasma, God and supernatural .

Conflict

The majority of tasks for the King of England was to defend the country and keep it peaceful. He was not interested in Public Health.

Revolution

Louis Pasteur and the Germ Theory – In 1861 French scientist Louis Pasteur came up with the Germ Theory which challenged the idea of Spontaneous Generation and finally led the way to understand the true cause of disease!
A HUGE breakthrough!

Tax & Economy

The government did not take any taxes to improve peoples health or medicine, so no money was spent to improve medicine.

Only during a crisis (the Black Death) did the government aim to tackle public health.

Half Term 6 Subject Spanish Y10 Celebrity Culture ¿A quién sigues en TikTok? ¿Quién es tu famoso favorito?

Week 1

VERB	NOUN	ADJECTIVE
tiene = he / she has tienen = they have	los ojos = eyes el pelo = hair	marrones = brown azules = blue verdes = green grises = grey rubio = blond castaño = brown moreno = dark brown pelirrojo = ginger largo = long corto = short liso = straight ondulado = wavy rizado = curly
es = he / she is son = they are	un poco = a bit bastante = quite muy = very	alto = tall bajo = short delgado = slim gordo = fat grande = big pequeño = small guapo = good looking feo = ugly calvo = bald joven = young viejo = old

Week 2

Verb	Noun	Adjective	Connective and verb	Adjective
Lleva = he / she wears	un jersey = a jumper	blanco /blanca / blancos / blancas = white	because it's / they are	elegante(s) = elegant, stylish
	un vestido = a dress	negro / negra / negros / negras = black	dado que es / son	diferente (s) = different
Llevaba = he / she used to wear	un traje = a suit	rojo / roja / rojos / rojas = red		guay = cool
	un sombrero = a hat			
	una gorra = a baseball cap	amarillo / amarilla / amarillos / amarillas = yellow	ya que es / son	cómodo/a/os/as = comfortable
Llevó = he / she wore	una falda = a skirt	morado / morada / morados / moradas = purple		incómodo/a/os/as = uncomfortable
	una camisa = a shirt	azul / azules = blue	puesto que es / son	de moda = fashionable
	una rebeca = a cardigan			
Va a llevar = He /she is going to wear	una camiseta = a t-shirt	marron / marrones = brown		feo /a/os/as = ugly
	una corbata = a tie	gris / grises = grey		bonito /a/os/as = pretty
Llevará = He / she will wear	una chaqueta = a jacket	verde / verdes = green	porque es / son	
	unos pantalones = trousers unos pantalones cortos = shorts	naranja / naranjas = orange		
	unos zapatos = shoes	rosa / rosas = pink	aunque es / son =	
	unos calcetines = socks	estampado / estampada / estampados / estampadas = patterned	although it's / they are	
	unos vaqueros = jeans	de rayas = striped		
	unas botas = boots	a cuadros = checked		
	unas zapatillas deportivas = trainers	de flores = flowery		

Week 3

Time expression	Person	Verb	Time
Siempre = always A menudo = often De vez en cuando = sometimes A veces = sometimes	(yo) = I	me despierto = I wake up me levanto = I get up me visto = I get dressed me peino = I brush my hair me lavo los dientes = I clean my teeth me pongo el uniforme = I put on my uniform	a las seis y media = at half past six a las siete = at seven o'clock a las siete y cuarto = at quarter past seven a las ocho = at eight o'clock
Normalmente = normally Rara vez = rarely Casi nunca = almost never Nunca = never	mi madre = my mum mi hermano = my brother mi hermanastra = my stepsister mi abuela = my grandma mi padre = my dad	se despierta = he /she wakes up se levanta = he/she gets up se viste = he / she gets dressed se peina = he /she brushes his/her hair se lava los dientes = he / she cleans his /her teeth	temprano = early tarde = late
Primero = First Luego = Then Después = After Antes = Before Finalmente = Finally	mi hermana y yo = my sister and I mis abuelos y yo = my grandparents and I mi madre y yo = my mum and I mi prima y yo = my cousin and I	nos despertamos = we wake up nos levantamos = we get up nos vestimos = we get dressed nos peinamos = we brush my hair nos lavamos los dientes = we clean my teeth	rápidamente = quickly lentamente = slowly
	mis padres = my parents mis hermanos = my siblings mis abuelos = my grandparents mis tíos = my aunt and uncle	se despiertan = they wake up se levantan = they get up se visten = they get dressed se peinan = they brush their hair se lavan los dientes = they clean their teeth	

Week 4

CONNECTIVE In my opinion	VERB	ADJECTIVE	CONNECTIVE	
En mi opinión Desde mi punto de vista A mi modo de ver Que yo sepa	_____ es un buen modelo a seguir porque es = _____ is a good role model because he / she is sigo a ___ en TikTok porque es = I follow ___ on TikTok because he/she is ____ es mi estrella favorita dado que es = _____ is my favourite star because he / she is ____ es mi famoso/a favorito ya que es = ___ is my favourite celebrity because he /she is	gracioso/a = funny simpático/a = kind sincero/a = sincere modesto/a = modest educado/a = polite inteligente = intelligent trabajador(a) = hardworking humilde = humble optimista = optimistic generoso/a = generous ambicioso/a = ambitious	y = and también = also	me inspira mucho = he /she inspires me a lot usa su fama para ayudar a otras personas = he /she uses his /her fame to help others apoya a organizaciones benéficas = he/she supports charities ha tenido buena / mala prensa = he/she has had good / bad press ayuda a otra gente = helps other people trata de ser una buena influencia = tries to be a good influence
A mi juicio Para mí	_____ no es un buen modelo a seguir porque es = _____ is not a good role model because he / she is	agresivo/a = agressive egoísta = selfish perezoso/a= lazy deshonesto /a = dishonest antipático/a = unkind molesto/a = annoying pesimista = pessimistic maleducado/a = rude	pero = but aunque = although	dona dinero a los pobres = he /she donates money to the poor ha tenido mucho éxito = he /she has had a lot of success ha superado muchos problemas = he /she has overcome lots of problems ha ganado varios premios = he /she has won several prizes

Year 10 Subject: Level 1/2 Vocational Award in Performing Arts Topic: Musical Theatre 1

Musical Theatre - Context and Background Facts

Musicals use singing, dancing, and talking to tell stories. They are meant to be entertaining and are usually lighter and funnier than opera. They have easy melodies - audiences could sing along.

They usually have an orchestra to accompany the singers, but many musicals today also have rock instruments such as electric guitars, synthesisers and drumkits.

Early musicals were influenced by jazz and swing music while lots of musicals from the 1970s onwards used rock music.

The types of musicals that are around today began in the 1920s and developed into the 21st Century.

The genre started out on Broadway, a famous theatre street in New York. Later ones were shown in London's West End.

Some songs from Musicals have hit the charts such as Evita's "Don't Cry For Me Argentina" and "Memory" from Cats.

Many musicals have been made into popular musical films; The Sound of Music, Hairspray, Grease, Billy Elliot, Mamma Mia and Les Miserables, Rent, Annie and West Side Story are just a few.

Musicals are usually written in the styles of the popular music that is around at the time. For example, Hamilton, which premiered in 2015, draws on elements of hip hop, as well as R&B, pop, soul, and traditional-style show tunes.

Types of Musicals:
Book Musical (A musical with a story), **Concept Musical** (the idea or concept is more important than the plot - A Chorus Line), **Jukebox Musical** (Popular songs by one artist; We Will Rock You, Mamma Mia), **Rock Musical** (uses rock music).

Voice Types

There are 4 main different voice types we need to be able to recognise. Each voice type is based on how high or low the singer can sing.

Soprano - a HIGH female voice.

Alto - a LOW female voice.

Tenor - a HIGH male voice

Bass - a LOW male voice.

Subject Vocabulary

Character	A person portrayed in a drama, novel, or other artistic piece.
Rhythm	Rhythm is the organisation of sound into a pattern. In dance, this pattern is created by the coordination of movement with the musical beats.
Style	Characteristic way of dancing.
Musicality	The ability to make the unique qualities of the accompaniment evident in performance.
Fluidity	Fluidity refers to the seamless, continuous flow of movement from one step to the next.
Spatial Awareness	Consciousness of the surrounding space and its effective use
Vocal Technique	The five vocal techniques—pitch control, tone quality modulation, resonance control, dynamics and volume adjustment, and precise articulation—enable individuals to expand their vocal versatility, adapt to various styles, emotions, and contexts, and convey their messages or expressions effectively.
Interpretation	Finding the meaning that is in the movement or finding the movement that is in the idea.
Intonation	Rising and falling of voice in speech.
Projection	Directing the voice out of the body to be heard clearly at a distance.

Important Composers and their Musicals: Gilbert & Sullivan 1842-1900 (The Mikado, HMS Pinafore), **Cole Porter** 1891-1964 (Anything Goes, Kiss Me Kate), **Rodgers & Hammerstein** 1895-1960 (Sound of Music, Oklahoma, Carousel), **Leonard Bernstein 1918-1990** (West Side Story) **Stephen Sondheim** 1930 (Sweeney Todd, Into the Woods), **Jerry Herman** 1931-2019 (Hello Dolly), **Schonberg & Boublil** 1941 (Les Misérables, Miss Saigon) **Andrew Lloyd Webber** 1948 (Joseph & the Amazing Technicolor Dreamcoat, Evita, Cats, Phantom of the Opera) **Alan Menken** 1949 (Little Shop of Horrors) **Stephen Schwartz** 1948 (Godspell, Wicked) **Lin-Manuel Miranda** 1980 (In the Heights, Hamilton, Moana, Encanto, Bring it on: The Musical).

Year 10 | Subject: Performing Arts | Topic: Jon Godber

WHO

John Godber is one of the most performed playwrights in the English language. Born in 1956, he is the son of a mining family who went on to be a drama teacher at the school he went to as a child. He joined Hull Truck theatre Company in 1984 and has since won many prestigious awards for his productions. He has written 17 plays and has directed all their first performances.

Originally from Upton, a working-class part of West Yorkshire, Godber has made his place of birth a focal point for his plays. One of his aims is to reflect the lives of the people around him and so his subject matter often surrounds the challenges that working class people face. He aims to appeal to a diverse audience, particularly working-class people who traditionally don't go to the theatre.

INFLUENCES

Godber claims that much of his influence comes from the world around him, his own experiences and the people that he meets. The majority of his plays are set in the North-West and are based around working class characters.

Many conventions of Brecht can be seen in 'Bouncers' – multi role-play, direct address, music, minimal set and props, changing characters on stage. These are designed to keep an active audience.

The characters portrayed by the four actors change just as quickly as the scenes; the core characters of the bouncers become a group of girls celebrating a birthday, lads on a night out and other nightclub patrons.

The use of multi role playing, along with the use of monologue and the actors directly addressing the audience, show the influence of other dramatists such as Bertolt Brecht, the intention being to reinforce the theatricality of the work and eschew the conventions of realism.

The first line of Bouncers, spoken by Lucky Eric, states "Ladies and Gentlemen, we present Bouncers". As such, the bouncers are the central characters and narrators of the play, although they also present all of the other characters.

Subject Terminology

Direct address	Direct address is used to engage the audience and involve them in the action of the play.
Multi role-play	Multi role-play is used in some Godber plays and so actors need to use precise vocal and physical skills to portray distinctive characters that the audience can easily recognise.
Music	Music is used to add atmosphere to a particular moment or to enhance the meaning of a scene.
Stock characters	His general performance style is heightened through the use of stereotypes or 'stock' characters, although his language and dialogue is largely realistic and conversational.
Inter-relationships	The way in which two or more things are related to each other.
Tension	As the audience anticipates certain outcomes in the plot, the **tension builds**. An obvious example of rising **tension** is in a mystery or whodunit.

AIMS

- Godber believes in theatre for the masses and so explores universal themes in his plays.
- He believes in the theatre as an instrument of social change for the better.
- Using comedy to engage the audience but also to make them think.

Year 10 | Subject: Performing Arts | Topic: Blood Brothers

HISTORICAL CONTEXT

Willy Russell's Blood Brothers, first performed in 1983, is set in Liverpool and explores themes of class, poverty, and fate. The play's historical context, especially relating to the social and economic conditions of Britain in the late 20th century, is crucial to understanding its themes and characters.

THEMES:

Class Inequality: One of the central themes of Blood Brothers is the divide between the working class and the upper-middle class. This reflects the stark class divisions in Britain during the 20th century, where people's lives and opportunities were often determined by the social class they were born into. The play contrasts the lives of the working-class Johnstone family and the middle-class Lyons family, showing how their class differences lead to dramatically different outcomes for the twins, Mickey and Eddie.

Social Mobility: During the 20th century, social mobility; the ability for individuals to improve their social status through education or employment, was often limited, especially for the working class. Blood Brothers highlights the lack of opportunity for working-class people, as seen in Mickey's life, where poor education, unemployment, and crime become unavoidable parts of his fate. Eddie, raised in a privileged environment, has access to better education and career prospects, reflecting the advantages of his middle-class upbringing.

Margaret Thatcher's Britain: The play was written and performed during the era of Margaret Thatcher's Conservative government (1979-1990). Thatcher's policies, which emphasised free-market economics, privatisation, and reduced government spending on social welfare, were seen by many as worsening the economic plight of the working class. Russell's depiction of the Johnstone family's hardships can be viewed as a critique of Thatcherism and the lack of support for the working poor.

Subject Terminology

Narrator	Narration is a technique whereby one or more performers speak directly to the audience to tell a story, give information or comment on the action of the scene or the motivations of characters. Characters may narrate, or a performer who is not involved in the action can carry out the role of 'narrator'.
Soliloquy	A speech where on character reveals their thoughts to the audience.
Cyclical Structure	A **cyclical structure** refers to a narrative framework where the story follows a circular pattern, often beginning and ending at the same point.
Tension	As the audience anticipates certain outcomes in the plot, the **tension builds**. An obvious example of rising **tension** is in a mystery or whodunit.

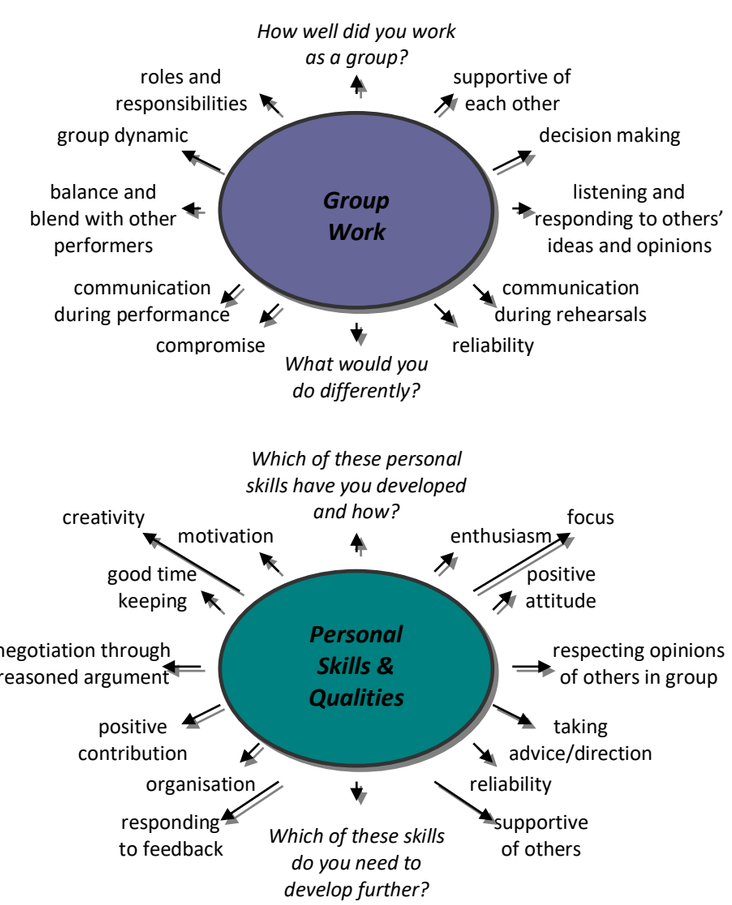
THEMES:

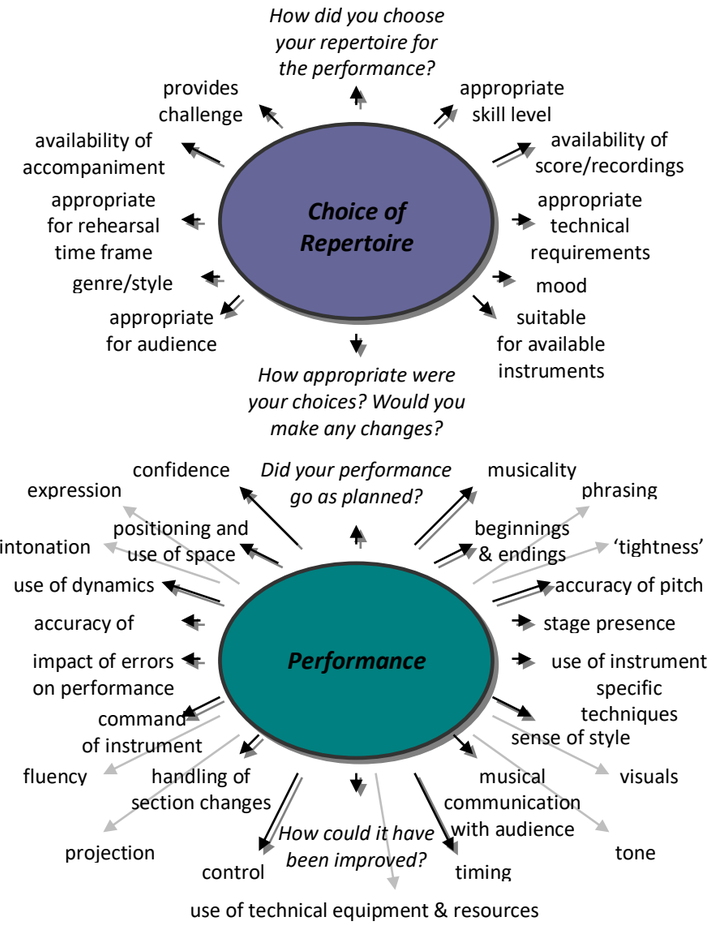
Unemployment and Poverty: High unemployment rates in the 1970s and 1980s, especially in the north of England, left many working-class families in poverty. The Johnstone family in Blood Brothers is directly affected by these economic struggles. Mrs Johnstone, a single mother of seven children, works as a cleaner, struggling to make ends meet, while the lack of opportunities for her son Mickey ultimately leads him into a life of crime. This mirrors the real experiences of many working-class families during this time.

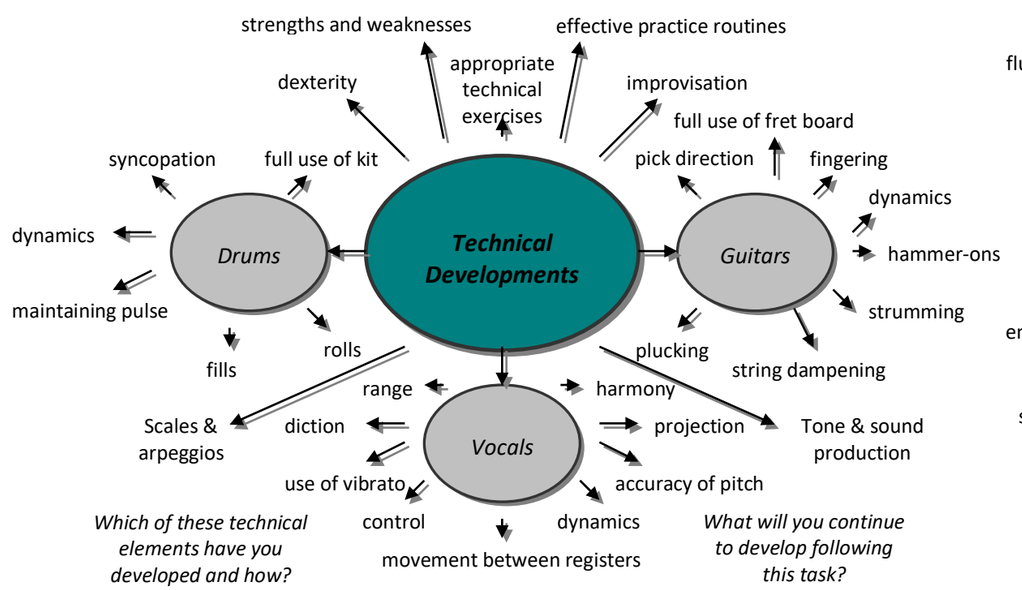
Fate and Superstition: Throughout the play, superstition plays a significant role, reflecting the belief in fate that was common in working-class communities at the time. Mrs Johnstone's belief that separating her twins will lead to disaster reflects a fatalistic view of life, where people's futures are determined by forces beyond their control. This theme of fate versus free will is explored throughout the play, particularly in how class and circumstances limit the characters' ability to shape their own destinies.

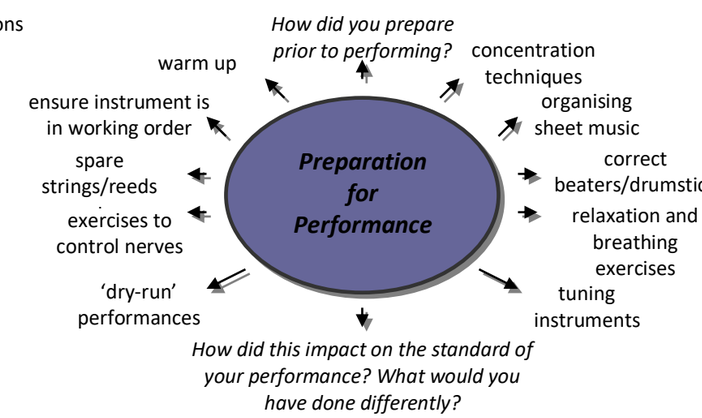
Rehearsal and Performance Evaluation Writing Frame

Year 10
Term 6









Year 10 – Term 6

ARTICULATION

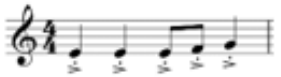
(How the notes are played)

Not Dynamics...

Articulation is the way the performer plays / sings the note, not how loud they do it. That would be Dynamics instead.

More Than One...

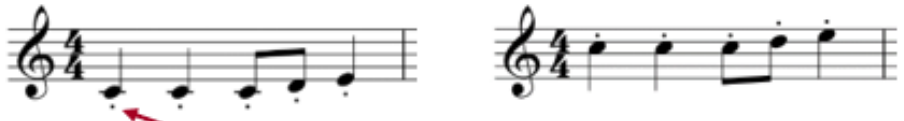
You can write more than one type of articulation for the same note. For example:



Staccato & Accented

Staccato

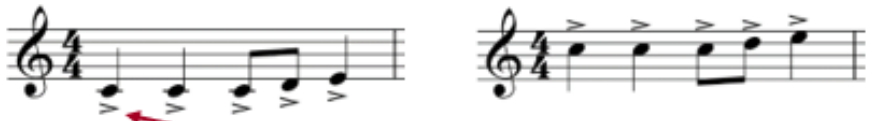
Staccato means short and detached /seperated. **You will likely hear a gap between each note.*



Shown by writing a **dot** just above/below the head of the note.

Accented

Give extra emphasis or force to the marked notes.



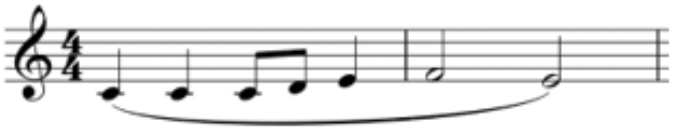
Shown by writing an **accent** above/below the head of the note.

Legato

To play the music smoothly, without breaks between notes.

Slurred

Playing the notes in a legato style, without breaks between notes.



Shown with a **slur** on the score.

How? Some examples:

String Instruments - Play the notes without changing the direction of the bow.

Don't change direction until you've finished the slurred notes

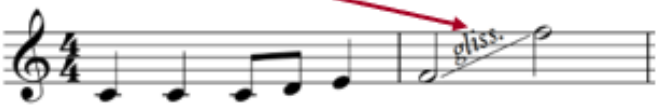
Brass & Wind Instruments - Only tongue the first note, not the others.

Glissando

*You can glissando upwards or downwards

A slide between two notes.

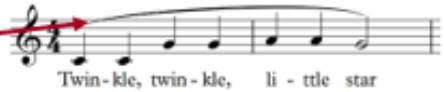
Marked with a **glissando** on the score.



Some Associated Markings On Vocal Music...

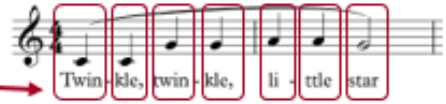
Phrase markings

Slurs drawn onto the score to show singers what to sing in one breath.



Syllabic

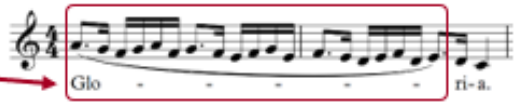
Where the music is written with one note per syllable.



Melismatic

Where the music is written with more than one note per syllable.

*A slur is used to show the notes on one syllable



Half-Term 3 - Brickwork

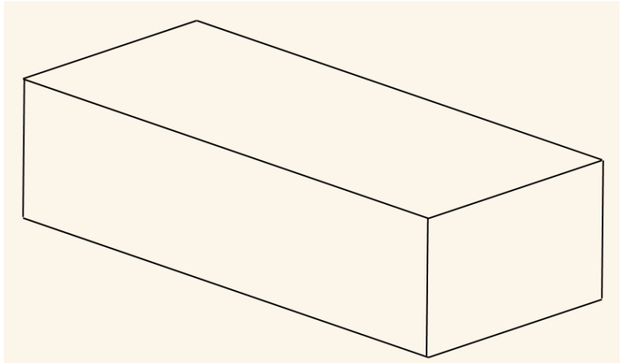
Subject - Construction

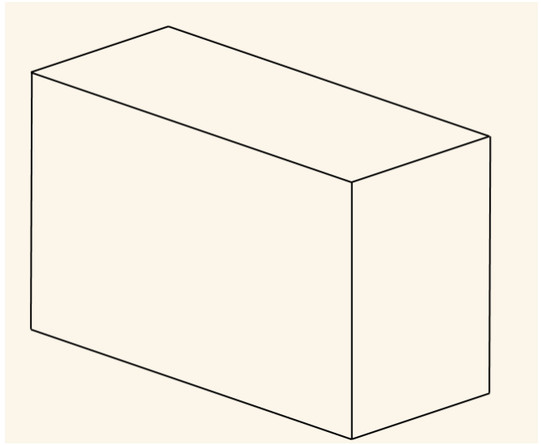
Brick dimensions

What is the length of a brick?
What is the width of a brick?
What is the depth of a brick?
How thick is a mortar joint?

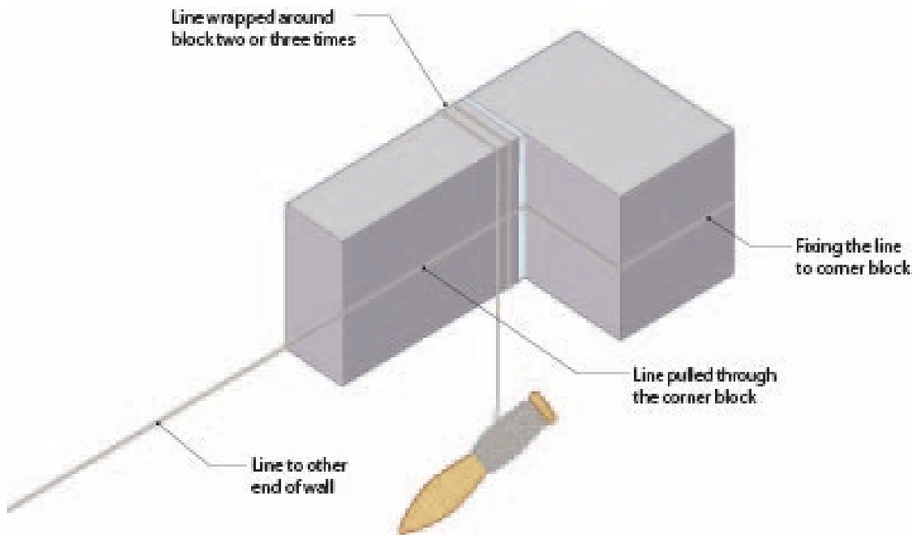
Block dimensions

What is the length of a block?
What is the width of a block?
What is the depth of a block?

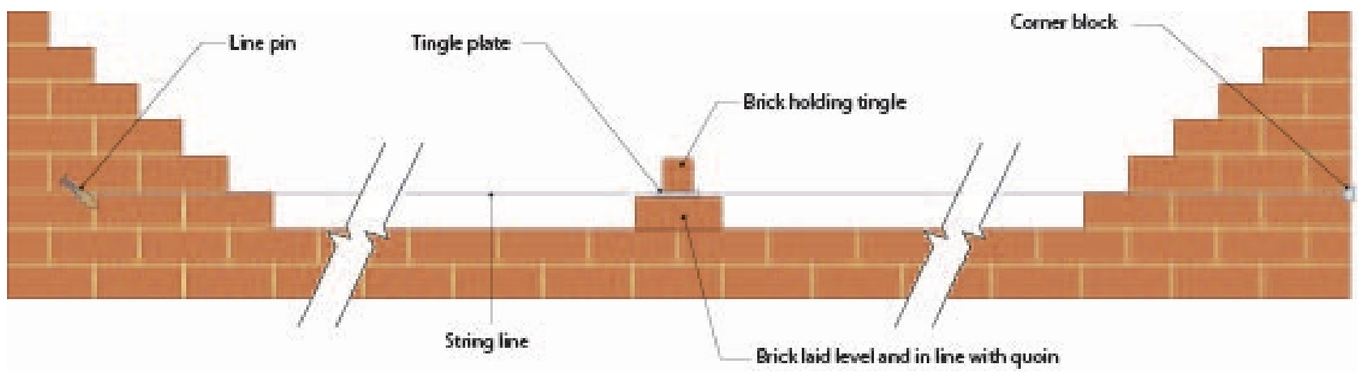




There are different methods of holding in place a string line so you can build to it.



- How does the tingle plate work?
- Why is it required?
- When would you use it?



CORE RE – Relationships and families HT5

What are Christian attitudes towards human sexuality?

Many Christians see heterosexual relationships as part of God's plan for humans. Genesis says that a man and woman should be united and 'increase in number.' Therefore, some are against sex outside marriage, homosexuality and artificial contraception.

Some Christians are against homosexuality based on Leviticus 18 but some Christians argue about the meaning behind these texts. The Bible does not mention relationships between two women. The Catholic Church teaches that being a homosexual is not a sin, but homosexual sex is. The Church of England welcomes faithful committed homosexual couples but does not marry them in church. Other Christians believe that the Bible passages need to be interpreted in context and would marry homosexual couples, just like heterosexual couples.

GCSE Theme: Religion, Relationships and Family

What are Buddhist Attitudes towards Sex?

Buddhist attitudes vary, depending on the country and culture.

Buddhism teaches that sex is not wrong, and that people have desires and they shouldn't be denied. However, sexual attraction leads to craving which can lead to craving which leads to suffering. Buddhists believe that their sexual behaviour should be guided by kindness, generosity, honesty and not causing harm to oneself or others.

Buddhist monks and nuns take a vow of celibacy. They avoid sexual activity as one aspect of a simple life.

The Buddha did not teach on homosexuality or same-sex relationships. Many Buddhists would say that the five moral precepts apply to all relationships. What matters is consent and respect.

What are Christian attitudes to Contraception and Family Planning?

All Christians believe that having children is a gift from God. Christianity also teaches that parents should be responsible and there may be times when bringing children into the world, because of economics or psychological reasons, is not sensible.

Christians disagree about the methods of limiting family size. The Catholic and Orthodox teach that artificial methods (condom) goes against God's purpose of sex which is to express love AND allow the possibility of creating new life. To use contraception is to be selfish and prevent God's plan. Any form of contraception should be natural (rhythm method). Some catholics disagree with this when considering the modern world.

Many Christians believe that sex is for creating new life OR express love and should make responsible choices about family life. Also contraception may be used to protect the mother's health and to allow a time for the relationship to develop.

Some Christians will only use certain forms of contraception because some allow for the egg and sperm to meet (coil) and they see this as causing an early form of abortion and the ending of life that started at conception.

SUBJECT TERMINOLOGY

Adultery	a married person having sex with someone other than their marriage partner
Civil partnership	a legal ceremony giving a homosexual couple the same legal rights as a husband and wife.
Cohabitation	living together without being married
Contraception	intentionally preventing pregnancy from happening.
Divorce	Legal ending of a marriage
Extended family	A family which extends beyond the nuclear family to include grandparents and other relatives.
Faithfulness	staying with your marriage partner and having sex only with them.
Family planning	Using contraception to control how many children couples have and when they have them.
Gender equality	The idea that people should be given the same rights and opportunities regardless of whether they are male or female.
Gender prejudice	Unfairly judging someone before the facts are known ; holding biased opinions about an individual or group based on their gender.
Gender discrimination	Acting against someone on the basis of their gender; discrimination is usually seen as wrong and may be against the law
Nuclear family	mother, father and the children living as a unit
Procreate	Produce children
Human sexuality	How people express themselves as sexual beings
Heterosexual	Sexually attracted to members of the opposite sex
Homosexual	Sexually attracted to members of the same sex
Marriage	A legal union between two people as partners in a relationship
Polygamy	The practice or custom of having more than one wife or husband at the same time.
Re-constituted family	where two sets of children become one family when their divorced parents marry each other.
Re-marriage	marrying again after being divorced from a previous marriage.
Sex before marriage	Sex between two single unmarried people
Same sex marriage	Sex between partners of the same sex

What are Buddhist Attitudes to Contraception and Family Planning?

Buddhist traditions may differ about contraception because of when it is believed consciousness arises. Some may say at conception, some may say that it is continuous from life to life. Most Buddhists believe that it is acceptable to use a form of contraception that prevents fertilisation, but others would say something like the morning after pill is less acceptable as it may be seen as a form of killing and going against the first moral precept. If having the child might harm the life of the mother, the morning after pill may be seen as the lesser of two harms.

Having children is not a sacred duty in Buddhism and the Buddha did not recommend family life as a path to enlightenment. Buddhists can choose what to do but should be able to bring children up is a happy and safe environment.

What are Buddhist teachings on Marriage?

Marriage is a social contract and not a religious duty or sacred act. Marriage is a secular ceremony depending on the country but a Buddhist monk may bless the service.

Having children is not seen as the purpose of marriage and there is no obligation or pressure to have them. Because everything is interconnected a benefit of married couples is that it develops relationships which produce stronger communities.

Most ideas around sex before marriage are cultural but it is not forbidden but must be according to the five moral principles. The same is true of cohabitation. Most Buddhists would see adultery as wrong as it involved dishonesty and does not show kindness towards your partner. Same sex marriages are more likely to be accepted because of culture. Buddhism does not teach against them but teaches that in any relationship respect should be shown.

What are Buddhist teachings on Divorce?

Buddhism does not say that a couple cannot be divorced but does say that they should lead a life of implied duty and responsibility to one another so would not encourage it. Often ideas about divorce are also influenced by cultural values. By following the five moral precepts and trying to lead a life developing loving-kindness Buddhists is more skilful and would be encouraged to try and make their marriage work.

Buddhists are also likely to teach that hanging on to a broken relationship produces suffering and should be avoided. Buddhism accept that divorce may well be a painful process, but every attempt should be made to make it as respectful as possible. Causing hurt will never make a person happy.

Buddhists also do not teach against remarriage as it may be a way to commit to a new relationship and find happiness.

What are Buddhist teachings on the nature and purpose of family life?

Buddhism is not a family-centred religion, there is no expectation to have children. The nature of the family, extended or nuclear, usually reflects the customs of the country they live in. The Buddha did not forbid polygamy but did say it may cause suffering for those involved. Same-sex parents are accepted as long as the relationship is respectful, Buddhist values are more important than gender.

Buddhism does not teach about family life apart from the general rules to be loving, caring and to remain faithful to each other. Parents are responsible for raising children and teaching them the faith. Buddhist will often have a shrine in the home and children are shown how to show respect to the Buddha.

In later life, children are expected to support their parents when old age or illness becomes an issue.

What are Christian Teachings about Marriage?

Society now recognises same-sex marriages as having the same legal status as non-same sex marriages. Many Christians are against this as they see marriage as being more than a committed relationship and somewhere that new life can be created. The law protects churches from having to marry same sex couples.

For many Christians marriage is seen as part of God's plan to unite couples. Some Christians see it as a sacrament which reflects the commitment made by God to humans. Marriage is a spiritual bond that reflects the love of God. For many Christians the purpose of marriage is to provide a stable, secure environment for family life.

Christians who are opposed to sex before marriage also oppose cohabitation. Many Anglican and protestant Christians believe that marriage is best, but people may live together in a faithful, loving and committed way without being married.

What are Christian teachings on Divorce?

Some Roman Catholic Christians believe there can be no divorce because Jesus banned divorce. Also when you marry, you make a covenant with God which cannot be broken without God's consent. Therefore a couple can never be divorced according to God's law. Catholics do have Marriage Tribunals which can decide that a marriage never existed (annulment), but there can be no divorce and Catholics who have state divorces are not allowed to remarry.

Most Protestant Christians believe that if a marriage goes wrong and there is no chance of bringing the couple back together, then there can be a divorce. They believe this because God is always prepared to forgive sins if people are determined to live a new life, and in St Matthew's Gospel Jesus allows divorce for adultery.

What are Christian teachings on Family Life?

All Christians believe that children should be brought up in a family with a mother and father (unless one of them has died). Christian marriage services refer to founding a family and bringing children up in a Christian environment as a major purpose of marriage.

Christians see the family as the basis of society. Children are a gift from God and parents are expected to look after them properly (feeding, clothing, educating, etc) and help them to be Christians by having them baptised and taking them to church on Sunday. Christian children are expected to respect their parents (fifth commandment) and care for them when they are old.

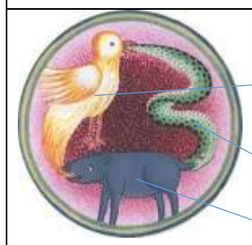
Subject **RS** Buddhism: beliefs and teachings.

Before enlightenment	
How long ago was Buddhism founded?	Buddhism was founded around 2500 years ago.
Who is the founder of Buddhism?	The founder of Buddhism was Siddhartha Gautama, he was born around 500BCE.
Who were Siddhartha's parents and what did this mean for his lifestyle?	Siddhartha's parents were King Suddhodana and Queen Maya and he had a life of 'material' luxury.
Queen Maya had a dream before Siddhartha was born what was it? What did it mean?	Queen Maya dreamt about a little white elephant who told her that her child would be holy.
After his mother died the King tried to protect his son from all hardships – what were the four sights that changed Siddhartha's life?	The four sights were old age; illness; death and a holy man. 
When he was an ascetic how was Siddhartha trying to understand the problem of suffering?	Siddhartha practiced living in extreme temperatures and places of danger; he slept on thorns and survived on very small amounts of food.
How did the demon Mara try to distract Siddhartha from gaining enlightenment?	Mara tried to distract Siddhartha by sending his daughters; his armies; offering control of his kingdom and questioning Siddhartha.
How long did Siddhartha's enlightenment take?	Siddhartha's enlightenment took place during 3 parts (watches) of the night.

TECHNICAL VOCABULARY	
Buddha	This is a title meaning 'awakened one' or 'enlightened one.'
Jakata	Popular stories about the life of Buddha.
Ascetics	People who live a simple and strict lifestyle with few pleasures or possessions. They are searching for spiritual wisdom.
Meditation	The practice of calming and focussing the mind.
Enlightenment	Spiritual wisdom that comes from understanding the true reality of nature.
Mara	A demon that represents spiritual obstacles and temptation.
Dhamma	The truth Buddha realised when he became enlightened.
The three marks of existence	Dukkha (suffering); Anicca (impermanence) and Anatta (nothing is permananet).
The four noble truths	These are dukkha (suffering); samudaya (cause of suffering); nirodha (suffering can end) and magga (there is a means to end suffering).
Arhat	A perfected person

After Enlightenment: Teachings	
What is the Dhamma?	Dhamma refers to the Buddha's teachings but is also about truth; training and universal 'law'.
What are the three refuges (or jewels) in Buddhism?	The three refuges (jewels) in Buddhism are the Buddha; the Dhamma and the Sangha (the Buddhist community).
What is the idea of dependent arising?	Dependent arising is the idea that everything arises in dependence upon conditions. It is shown as the Wheel of Life.
What does the Tibetan Wheel of Life show?	The Wheel of Life shows dependent arising as applied to birth, death and rebirth (samsara).
What are the three marks of existence?	The three marks of existence are suffering (Dukkha); impermanence (anicca) and having no permanent, fixed self or soul (anatta).
What are the 3 recognised types of suffering?	The three types of suffering are ordinary suffering (dukkha-dukkhata); suffering because of change (viparinama-dukkha) and suffering because of attachment (samkhara-dukkha).
How does anicca (impermanence) affect the	Anicca affects the world in the three following groups – living things; non-living things and people's minds.
What does the story of Nagasena and the chariot	The story of Nagasena and the chariot illustrates that there is no fixed part to a person.
What are the Four Noble Truths?	The Four Noble Truths are- 1/ dukkha (suffering); 2/ samudaya (causes of suffering); 3/ nirodha (suffering can end) and 4/ magga (there is a way to end suffering).
What are the 5 aggregates/skandhas?	The 5 aggregates/skandhas are Form: Sensation; Perception; Mental Formations and Consciousness.

Suffering, causes and routes to happiness



The 3 poisons

Greed/desire shown by a cockerel.

Hatred/anger shown by a snake.

Ignorance shown by a pig.

The **threefold way** makes up the sections of the eightfold path. They are ethics; meditation and wisdom.

The Eightfold Path has 8 aspects that Buddhists practice and live by in order to achieve enlightenment. It is split into the threefold way and can be understood as a range of practices that should all be developed. They are: -

Ethics – right speech; right action; right livelihood.

Meditation – right effort; right mindfulness; right concentration.

Wisdom – right understanding; right intention.

How does a person become an **Arhat**?
An arhat has overcome the main sources of suffering and has become enlightened so the cycle of rebirth ends and reach nibbana, this means that have followed and fulfilled the Eightfold Path.

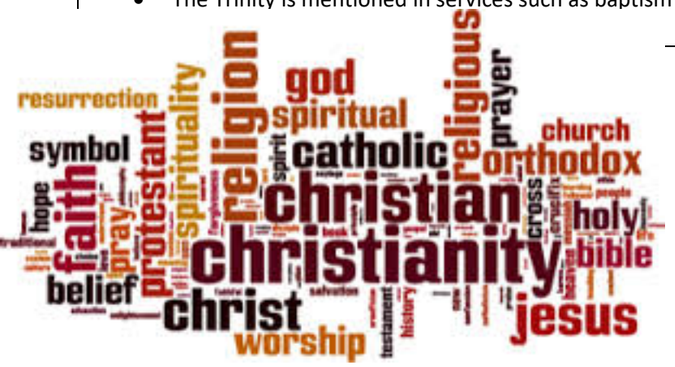
Year 11 Christian Beliefs

God as omnipotent

- This means all-powerful, not that he can do anything – even against his nature.
- This can be seen in the creation and wonders of the universe.
- Miracles performed by God and Jesus (Jesus is God in human form)
- What it means for Christians is they believe nothing can overcome God's powers.

The Oneness of God and the Trinity

- Christianity is a monotheistic faith – they believe in one God
- But God has been revealed as Father (creator), Son (Jesus the saviour) and Holy Spirit (source of strength and guidance)
- When Christians speak of the three persons of the trinity they do not mean three people just as being known in three ways.
- They support this belief because they say God's nature is beyond our understanding and this is an attempt to make sense of what the Bible says.
- The Trinity is mentioned in services such as baptism and as part of blessings.



God

The Incarnation

- The word literally means 'embodiment' and refers to the idea that God took on human form in Jesus (John 1:14)
- Christians believe that Jesus was fully God (the Word) and fully human (born of Mary)
- This is hard to explain but describes the disciples experience of Jesus
- Throughout the New Testament it states that Jesus is the Son of God, Mary conceived from the Holy Spirit and was a virgin.
- The virgin birth is seen by some as literal, emphasising the divine nature of Jesus, other metaphorical highlighting his unique human nature.
- Jesus speaks of not knowing all things – like the time of the end of the world – so people question how he is fully divine.
- Early Christians believed that Jesus, as God, fully took on human form in order to redeem humanity
- Christians are supposed to live their lives in the same submission to God the Father showing selfless love – even to the point of death.

SUBJECT TERMINOLOGY	
Catholic	a branch of Christianity, based in Rome and led by the Pope
Orthodox	a branch of Christianity mainly, but not entirely, practiced in Eastern Europe
Protestant	a branch of Christianity that became distinct from the Catholic Church at the time of the Reformation
Denomination	a distinct group within the Christian faith, with its own organisation and traditions
Monotheistic	a religion that believes there is only one God
Holy	separate and set apart for a special purpose by God
Omnipotent	almighty, having unlimited power; a quality of God
Benevolent	all-loving, all-good; a quality of God
Justice	bringing about what is right and fair, or making up for a wrong that has been committed.
Trinity	the belief in God as one in three forms, Father, Son and Holy Spirit
Son of God	a title used for Jesus, the second person of the Trinity; denotes a special relationship between Jesus and God the Father
Creation	the act by which God brought the universe into being
The Word	a term used at the beginning of John's Gospel to refer to God the Son.
Incarnation	God becoming a human being, being born as Jesus
Holy Spirit	The third member of the Trinity

Beliefs about Creation

- Christians believe that God created the world
- The Nicene Creed states that Christians believe in God the Father, creator…
- Genesis 1:1 also states 'in the beginning God created the heavens and the earth
- John's Gospel also states that Jesus (the Word) was also there and was part of this creation.
- Genesis 1 also speaks of the Spirit of God moving over the waters changing chaos into order
- THE TRINITY IS SEEN AS ACTING IN CREATION

The Crucifixion

What happened:

Being fully God but also fully human, Jesus suffered pain. A centurion accepted that Jesus was the Son of God.

The guards made sure Jesus was dead. His body was put in a cave before the Sabbath day.

Why is it important?

- It shows that **Christians will be forgiven for their sins** if they are truly sorry.
- **God understands human suffering** because of the suffering of his son, Jesus.
- **Suffering is a part of human** life, just as it was part of Jesus' life.
- It shows that Jesus was **fully God and fully man.**
- It teaches Christians that forgiveness is possible- Criminals on the cross.
- Teaches Christians that God loves them

Christ as Saviour

- John 3:16 says that God loved the world so much he gave his son as an atonement
- Jesus bore humanity's sin on the cross
- God took the initiative when humanity couldn't
- It inspires others to take the initiative in reconciliation in the world today and to dedicate their lives to the way of God

The Resurrection

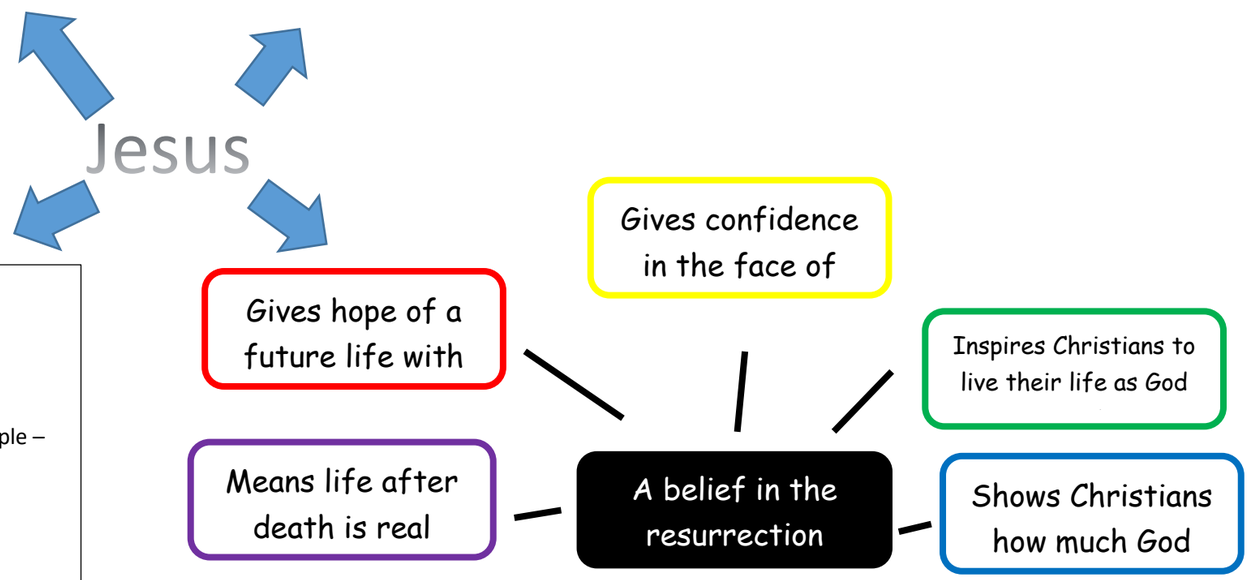
- The New Testament says that a man named Joseph was given permission to bury Jesus in a rock tomb
- The Sabbath was about to start so the women were not able to prepare the body properly
- A huge bolder was put in front of the tomb
- Early Sunday the women went to attend to the body but the stone had been moved
- The Gospels vary about what happened next but the body was missing
- According to Mark a man in white told the women to go back to the disciples and wait for him there.
- All reports stress the physical nature of his visits to show it wasn't a ghost
- This idea is important because it shows that God has overcome the power of death.

The Ascension

- After meeting with his disciples and asking them to do his work, Jesus left them for the last time.
- This was 40 days after the resurrection.
- When Jesus ascended into Heaven the Holy Spirit came to the disciples.
- This was known as Pentecost. The Holy Spirit gave the disciples the gifts to spread the word for example – Speaking in tongues.

This is significant because…

- Shows that Jesus is with God in heaven.
- Prepare for God to spend the Holy spirit to provide comport and guidance.



Year 10 HT6 **Child Development: Learning Through Play (Unit 2).**

Physical Play	
What do children learn through physical play?	Spatial awareness Activities to stay healthy How to take care of yourself and self-care Gross motor skills Fine motor control
What activities and resources can we use for physical play and learning?	Role play of home life situations Food preparation, snack times and handwashing Bat and ball games Tricycles, bicycles, sit and ride toys Climbing frames, swings, slides Creative activities Playdough, sand and water activities Construction toys Baby gyms, push along toys, rattles.

Cognitive Play	
What learning is promoted through cognitive play?	Problem solving skills Creativity Use of imagination Listening and attention skills Numeracy skills Exploration of environments inside and outside Confidence using technology Understanding of others' experiences
What activities and resources can we use for cognitive play?	Counters, weights, play money Shape sorters, puzzles, matching pairs Trips and visits Digging and building Computer games, apps, PCs, tablets Writing Small world toys

Social Play	
What learning is promoted through social play?	Development of friendships and relationships Emotional support networks Sharing, turn taking, compromise.
What activities and resources can we use for social play?	Team games and activities Group activities Role play Board games

TECHNICAL VOCABULARY	
Unoccupied play	Baby makes movements discovering how their body moves.
Solitary play	A child plays alone, not interested in playing with others.
Spectator/onlooker play	A child watches other children play but doesn't join in with them.
Parallel play	A child plays alongside or near others but does not play with them.
Associative play	A child starts to interact with others during play but there is not a lot of interaction.
Co-operative play	A child fully interacts with others and is interested in the activity and other children, they create their own rules.
Locomotor play	Any type of physical activity using gross motor skills- enjoying movement.
Creative play	Freedom to explore resources, making something, trying new ideas.
Sensory play	Using the senses to explore, discover textures and functions.
Imaginative play	Children pretend in some ways, act out their experiences, role play and small world play.

Communication and language play	
What learning is promoted through communication and language play?	Listening skills Process of following instructions Vocabulary and literacy skills, speaking and questioning skills Expressing and discussing feelings Having conversations
What activities and resources can we use for communication and language play?	Books – lift the flap, textured, stories, talking books, story sacks. Role play Nursery rhymes, songs, dances Listening/action games.

Emotional Play	
What learning is promoted through emotional play?	Expression of feelings Promoting independence Improving confidence, esteem and awareness Building relationships
What activities and resources can we use for social play?	Puppets and dolls Role play activities Emotion faces Mirrors Circle time/carpet time

Half-Term **May 2025 – July 2025** Subject **Business Studies** Threshold Concept Link(s) **Building the business**

Business and globalisation	
What has globalisation led to?	The growth of multinationals.
What 3 ways does globalisation affect businesses?	Imports, exports and business locations.
Give a positive and negative concerning imports in a country.	Positive – business may stock a larger range of products Negative – may be less demand for domestically produced goods.
What are the benefits of exporting goods?	Provides domestic business with a wider target market and the opportunity to sell around the world.
How does globalisation affect business locations?	Businesses can choose to locate offices/premises abroad due to the ease of international trade, communication and travel. Can open outlets abroad to enter new markets.
What is international trade?	The buying and selling of goods and services between countries.
What are the barriers that can prevent business from engaging in international trade?	Tariffs (tax that is imposed). Trading bloc – countries that agree to trade between themselves
How do businesses complete internationally?	Using the internet and e-commerce. – allows businesses to trade 24/7.
Why might businesses need to change elements of their marketing mix?	In order to compete internationally.
What elements could change?	Price, place, promotion and product.

TECHNICAL VOCABULARY	
Globalisation	When businesses operate on an international scale and gain international influences or power.
Imports	The flow of goods and services into a country from another country.
Exports	The flow of goods and services out of a country to another country.
Domestically	At home or within a businesses' home country.
Tariff	A tax imposed on imports or exports
Protectionist measure	An action taken by a government to reduce the flow of imports into the country.
Trading block	A group of countries that agree to act together to promote trade between themselves.
Marketing Mix	The 4 P's of marketing, which are product, price, promotion and place.
Aesthetics	The visual attractiveness of something.
Product portfolio	The range of goods and services offered by any one business.

Ethics, the environment and business	
What do ethical behaviours include?	Treating workers, suppliers + consumers fairly, ethical sourcing of materials, caring for the community and meeting government legislation
What are the advantages for an ethical business?	Consumers will pay a higher price for ethically sourced products. Happier employees.
What will a business that behaves unethically attract?	Negative media attention, damaged reputation and brand value.
What is the trade-off between ethics and profits?	The actions taken to behave ethically can be negative on profits.
What considerations must be taken into account regarding the environment?	Pollution, use of non-renewable resources, long term damage to the environment, waste disposal, reducing packaging and carbon footprint.
What audit do large businesses usually carry out?	Green audit to assess their impact on the environment.
What do some businesses that use wood have a policy of?	Planting a tree for every one that they cut down and use.
Give examples of pressure groups	Greenpeace, the Fairtrade Foundation, Wold Wide Fund for Nature.
What activities do pressure groups use?	Boycotts, social media campaigns, viral marketing, protests, petitions, media campaigns, lobbying.
Why do pressure groups do the above?	Media attention to put pressure on a business's marketing mix.

The marketing mix	
What are the 4 P's of the marketing mix?	Product, Price, Promotion and Place.
What is a product?	Might be a physical item or a service.
What is the key to a successful product?	To ensure it provides customers with benefits that they want.
What has to be considered in the design mix?	Function, aesthetics and function.
What do we mean when we say a product must be financially viable?	This means producing the product for a cost that allows the business to make a profit.
How can cost affect aesthetics?	You could use cheaper materials to lower costs but this may make the product uglier.
What are the 4 stages of a product's life cycle?	Initial introduction, growth, maturity and decline and discontinuation or extension.
What are the two simplest extension strategies?	Lowering prices Increasing advertising
What is a more complex extension strategy?	A total rebrand of a product, may need a new name, logo and promotion campaign.
How can a business differentiate their products?	Ensure that it has unique functions that rivals do not Have a unique style or design Create and use a distinctive brand Provide excellent customer service consistently Ensure the product is high quality

A1: Components of physical fitness	
Aerobic endurance	The ability of the cardiorespiratory system to supply oxygen and nutrients to the muscles to sustain low to medium intensity work to delay fatigue.
Muscular endurance	The ability of the muscular system to continue to contract at a light to moderate intensity to allow repetitive movements throughout a long event or game.
Muscular strength	The maximum force that can be generated by a muscle or muscle group to improve forceful movements within an activity.
Speed	Distance divided by time to reduce time taken to move the body or a body part in an event or game.
Flexibility	The range of motion possible at a joint to allow improvements in technique.
Body composition	The relative ratio of fat mass to fat-free mass in the body allowing variation in body composition dependent on the sport.
A1: Components of skill-related fitness	
Power	The product of speed and strength to allow for explosive movements in sport.
Agility	The ability to change direction quickly to allow performers to outmanoeuvre an opponent.
Reaction time	The time taken between a stimulus and the start of a response, useful in fast-paced sports to make quick decisions about what to do.
Balance	The ability to maintain centre of mass over a base of support, useful to maintain positions in performance sports (static balance) or when on the move in any other sporting situation (dynamic balance).
Coordination	The ability to move two or more body parts at the same time smoothly and efficiently, to allow effective application of technique.

A2: Training Principles

Frequency

How often a person trains. Normally measured over a weekly period.

Intensity

How much effort someone puts into a training session. Measured using the Borg Scale of Percieved Exertion.

Time

How long each training session lasts. Not training for long enough won't provide enough benefits. Training for too long could cause injury.

Type

Making sure you are using the correct type of training to meet your fitness goals. Someone wanting to build muscle would want to use weight training rather than endurance running